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APPENDIX

Supreme Court of the United States

TERM, 1971

No. 70-113

FORD MOTOR COMPANY, *Appellant,*

vs.

UNITED STATES, ET AL.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN

FILED APRIL 7, 1971

PROBABLE JURISDICTION NOTED JUNE 7, 1971

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July 7, 1970	Opinion of Chief Judge Freeman on Relief
December 18, 1970	Final Judgment of U.S. District Court for the Eastern District of Michigan
February 16, 1971	Notice of Ford Motor Company of Appeal to the Supreme Court of the United States

Complaint

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF MICHIGAN—SOUTHERN DIVISION

Civil Action No. 21911

Filed: November 27, 1961

UNITED STATES OF AMERICA,

Plaintiff,

v.

FORD MOTOR COMPANY and
THE ELECTRIC AUTOLITE COMPANY,

Defendants.

The United States of America by its attorneys, acting under the direction of the Attorney General of the United States, brings this civil action to obtain equitable relief against the above-named defendants and complains and alleges as follows:

JURISDICTION AND VENUE

1. The complaint is filed and this action is instituted against the defendants under Section 15 of the Act of Congress of October 15, 1914, c. 323, 38 Stat. 736, as amended, entitled "An Act to supplement existing laws against unlawful restraints and monopolies and for other purposes," commonly known as the Clayton Act, in order to restrain the continued violation by the defendants, as hereinafter alleged, of Section 7 of said Act, 38 Stat. 731, as amended by the Act of Congress of December 29, 1950, c. 1184, 64 Stat. 1125.

2. Defendant Ford Motor Company maintains offices, transacts business and is found within the Eastern District of Michigan.

3. Defendant The Electric Autolite Company transacts business and is found within the Eastern District of Michigan.

DEFENDANTS

4. Ford Motor Company, hereinafter referred to as "Ford," is named a defendant herein. Ford is a corporation organized and existing under the laws of the State of Delaware, with its principal office located in Dearborn, Michigan.

5. The Electric Autolite Company, hereinafter referred to as "Electric Autolite," is a corporation organized and existing under the laws of the State of Ohio, with its principal office located in Toledo, Ohio.

TRADE AND COMMERCE

6. Ford is primarily engaged in the manufacture and sale of passenger cars and trucks and related parts and accessories. The company also manufactures tractors, farm implements and related parts and accessories. In 1960 Ford was the third largest industrial corporation in the United States according to sales. Ford's sales for that year were $5,237,899,262; its total assets as of December 31, 1960, were $3,756,803,522.

7. The production of automobiles represents one of the nation's most highly concentrated major industries. In 1960 the three largest automobile manufacturers accounted for over 90 percent of total domestic automobile production. During the first half of this year the two largest automobile manufacturers (Ford and General Motors Corporation)

accounted for over 80 percent of the nation's automobile production. For the year 1960 Ford accounted for more than 28 percent of the total automobiles produced in this country. For the first six months of 1961 Ford's share of the total domestic production had increased to more than 30 percent.

8. Ford is the most highly integrated of the domestic automobile manufacturers and produces substantial portions of the steel, iron and glass required in its manufacturing operations. In addition to manufacturing substantial quantities of its basic raw material requirements, Ford also manufactures a substantial portion of its requirements of automotive electrical systems and components. For example, Ford manufactures most of its requirements of generators, starters and ignition coils, and the company also manufactures a substantial portion of its requirements of instruments, voltage regulators and horns. However, Ford has traditionally purchased its spark plugs and batteries from independent companies. Champion Spark Plug Company, hereinafter referred to as "Champion," has for many years supplied Ford's spark plug requirements for original installation and for sales in the automobile repair and replacement market, often referred to as the "after-market." Ford sells parts and accessories in interstate commerce throughout the United States through franchised car dealers and through independent parts distributors and jobbers.

9. Electric Autolite was, prior to the sale of certain assets to Ford, hereinafter described in more detail, one of the nation's largest non-integrated suppliers of automotive parts and accessories. The company manufactured a full line of automotive electrical products including batteries, generators, spark plugs, electrical motors, instruments and ignition systems. The company has, for many years, been

a supplier of parts to automobile manufacturers for installation as original equipment in automobiles. In addition, the company has for many years sold its products, including spark plugs, to automobile manufacturers, warehouse distributors, and jobbers, under the well-known trade name "Autolite" for automobile repair and replacement purposes. Electric Autolite's sales in the automobile repair and replacement market ("after-market"), were made through an experienced sales organization which distributed the company's products in interstate commerce throughout the United States.

10. The manufacture of spark plugs was, prior to the acquisition hereinafter more fully described, dominated by two independent, non-integrated manufacturers, Electric Autolite and Champion, and one integrated automobile producer, General Motors Corporation. These three companies manufactured spark plugs for original installation and for the automotive after-market. These three companies accounted for more than 90 percent of total domestic production in 1960.

11. Independent non-integrated producers, such as Electric Autolite, although small in size compared to the integrated automobile manufacturers, have played an important role in the introduction of new products, the improvement of technology, and the development of more efficient operations in the industry. These independent non-integrated companies act, to some extent, as suppliers of original equipment to automobile manufacturers and, to a greater extent, as suppliers of parts for the after-market.

12. There are certain recognizable patterns in the distribution of spark plugs, other electrical system parts, and automotive parts and accessories in general. Direct sales

are usually made by the manufacturer to large automotive parts distributors, oil companies, automobile manufacturers, tire manufacturers, chain stores and mail order houses. The automotive parts distributors normally resell to jobbers who in turn sell to garages, gas stations, automobile parts stores and sometimes to car dealers. The oil companies resell primarily to gas stations. The tire manufacturers resell to their own retail chain stores. The automobile manufacturers, in addition to using the parts as original equipment, resell to their dealers and also to jobbers, who in turn sell to gas stations, garages, automobile parts stores and other car dealers. Ultimately, mail order houses, chain and independent automobile parts stores, garages, gas stations, and car dealers compete in the sale of parts to the automobile owners.

13. Prior to the sale of certain assets to Ford, hereinafter described in more detail, spark plugs and other electrical system parts manufactured by Electric Autolite were sold in competition with similar products manufactured or distributed by Ford to jobbers, garages, car dealers, gas stations and automobile parts stores and truck and automobile fleets, as well as to car owners.

Offenses Charged

14. Pursuant to an agreement entered into on April 12, 1961, between Ford and Electric Autolite, Ford acquired, among other assets, the spark plug manufacturing facilities, the battery plant at Owasso, Michigan, the trade name "Autolite," and all of the customer lists and outstanding agreements with distributors and purchasers pertaining to the acquired operations of Electric Autolite. The effect of the foregoing agreement may be substantially to lessen

competition or to tend to create a monopoly in violation of Section 7 of the Clayton Act, among other ways, as follows:

a. Competition generally in the manufacture, distribution and sale of automotive parts may be substantially lessened;

b. Concentration in the production, distribution and sale of automotive parts has been substantially increased to the detriment of actual and potential competition;

c. Actual and potential competition between Ford and Electric Autolite in the manufacture, distribution and sale of automotive parts has been eliminated;

d. Electric Autolite has been eliminated as an important competitive factor in the manufacture, distribution and sale of automotive parts to the detriment of actual and potential competition;

e. Ford's advantage over its competitors in the manufacture and sale of automotive parts may be enhanced to the detriment of actual and potential competition;

f. Competition generally in the manufacture, distribution and sale of automotive electrical parts and components may be substantially lessened;

g. Concentration in the production, distribution and sale of automotive electrical parts and components has been substantially increased to the detriment of actual and potential competition;

h. Actual and potential competition between Ford and Electric Autolite in the manufacture, dis-

tribution and sale of automotive electrical parts and components has been eliminated;

i. Electric Autolite has been eliminated as an important competitive factor in the manufacture, distribution and sale of automotive electrical parts and components to the detriment of actual and potential competition;

j. Ford's advantage over its competitors in the manufacture and sale of automotive electrical parts and components may be enhanced to the detriment of actual and potential competition;

k. Competition generally in the manufacture, distribution and sale of spark plugs both for use in original equipment and for replacement purposes may be substantially lessened;

l. Concentration in the manufacture, distribution and sale of spark plugs both for use in original equipment and for replacement purposes has been substantially increased to the detriment of actual and potential competition;

m. Actual and potential competition between Ford and Electric Autolite in the manufacture, distribution and sale of spark plugs both for use in original equipment and for replacement purposes has been eliminated;

n. Electric Autolite has been eliminated as an important competitive factor in the manufacture, distribution and sale of spark plugs both for use in original equipment and for replacement purposes to the detriment of actual and potential competition;

o. Ford's competitive advantage over its competitors in the manufacture, distribution and sale of spark plugs both for use in original equipment and for replacement purposes may be enhanced to the detriment of actual and potential competition;

p. A substantial share of the automobile original equipment markets for spark plugs and batteries have been foreclosed to independent suppliers of these products to the detriment of actual and potential competition;

q. The Ford dealer organization, numbering approximately 8,000, has been foreclosed to independent suppliers of spark plugs, batteries and other automotive parts as possible outlets for their products to the detriment of actual and potential competition;

r. Ford's advantage over its smaller competitors in the manufacture, distribution and sale of automobiles may be enhanced to the detriment of actual and potential competition;

s. Mergers and acquisitions involving other manufacturers of automobiles, parts or related accessories may be fostered to the detriment of actual and potential competition in the manufacture, distribution and sale of such products.

PRAYER

WHEREFORE, plaintiff prays

1. That the acquisition described in paragraph 14 of this Complaint be adjudged a violation of Section 7 of the Clayton Act.

2. That under such terms and conditions as the Court may prescribe defendant Ford be required to divest itself of the unlawfully acquired assets of Electric Autolite including specifically the trade name "Autolite."

3. That the plaintiff have such other and further relief as the nature of the case may require and the Court may deem just and proper.

4. That the plaintiff recover the cost of this action.

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Answer

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF MICHIGAN

SOUTHERN DIVISION

Civil Action No. 21911

UNITED STATES OF AMERICA,

Plaintiff,

v.

FORD MOTOR COMPANY and THE ELECTRIC AUTOLITE COMPANY,

Defendants.

FORD MOTOR COMPANY, by its counsel, answers the complaint herein as follows:

1. Denies each and every allegation contained in paragraph 1 of the complaint, except that it admits that this action purports to have been instituted under Section 15 of the Clayton Act, c. 323, 38 Stat. 736, as amended.

2. Admits each and every allegation contained in paragraph 2 of the complaint.

3. States that it is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 3 of the complaint.

4. Admits each and every allegation contained in paragraph 4 of the complaint.

5. States that it is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 5 of the complaint.

6. Admits each and every allegation contained in paragraph 6 of the complaint, except that it states that it is without knowledge or information sufficient to form a belief as to the truth of the allegation that in 1960 Ford Motor Company ("Ford") was the third largest industrial corporation in the United States according to sales, and except that it denies that Ford's sales for 1960 were $5,237,899,262 and that Ford's assets as of December 31, 1960, were $3,756,803,522, and admits and avers that under Ford's principles of consolidation of accounts in effect on December 31, 1960, the sales of Ford and consolidated subsidiaries for the year 1960 were $5,237,889,262 and the assets of Ford and consolidated subsidiaries as of December 31, 1960, were $3,756,803,522.

7. Admits each and every allegation contained in paragraph 7 of the complaint, except that it denies that the production of automobiles represents one of the nation's most highly concentrated major industries.

8. Admits each and every allegation contained in paragraph 8 of the complaint, except that it denies that Ford manufactures any of its basic raw material requirement, that Ford is the most highly integrated of the domestic automobile manufacturers and that Ford traditionally has purchased its spark plugs and batteries from independent companies, and except that it admits and avers that Ford has purchased spark plugs and batteries from independent companies, and that Ford also sells parts and accessories directly to the United States Government.

9. Denies each and every allegation contained in paragraph 9 of the complaint, except that it admits and avers that The Electric Autolite Company ("Electric Autolite") has been a supplier of parts to some automobile manufacturers for installation as original equipment in automobiles, that Electric Autolite sold its products, including spark plugs, to automobile manufacturers, warehouse distributors, and jobbers under the trade name "Autolite" for automobile repair and replacement purposes, and that Electric Autolite's sales in the automobile repair and replacement market were made through a sales organization which distributed the company's products in interstate commerce in the United States.

10. Admits each and every allegation contained in paragraph 10 of the complaint, except that it denies that Electric Autolite in any way dominated the manufacture of spark plugs, and except that it states that it is without knowledge or information sufficient to form a belief as to the truth of the allegation that Electric Autolite, Champion Spark Plug Company and General Motors Corporation, together, accounted for more than 90 percent of total domestic spark plug production in 1960.

11. Denies each and every allegation contained in paragraph 11 of the complaint.

12. Denies each and every allegation contained in paragraph 12 of the complaint, except that it admits that there are many channels of distribution for automotive parts and accessories.

13. Denies each and every allegation contained in paragraph 13 of the complaint.

14. Denies each and every allegation contained in paragraph 14 of the complaint, except that it admits that pur-

suant to an agreement dated April 12, 1961, between Ford and Electric Autolite, Ford acquired certain assets from Electric Autolite, principally a spark plug manufacturing facility at Fostoria, Ohio, a battery plant at Owosso, Michigan, the trade name "Autolite," customer lists pertaining to the acquired operations of Electric Autolite and certain agreements between Electric Autolite and certain parties pertaining to the acquired operations of Electric Autolite.

WHEREFORE, defendant Ford Motor Company demands judgment against plaintiff herein dismissing the complaint as to it with costs and disbursements and for such other and further relief as to the court may seem just and proper.

Dated: January 25, 1962

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Opening Statement of Jerome G. Shapiro, Attorney for Ford Motor Company

[40] Now this is an unusual condition, but it is explicable and exists because of the economics, the business dynamics, of the spark plug industry. There has never been, your Honor, more than one major supplier for each major make of vehicles—major vehicle manufacturer. This phenomenon results from a couple of interrelated factors. In the first place, it is the consequence of the technology of the spark plug industry. A spark plug must be qualified by a vehicle maker before it achieves the status of recognition that it needs in order to be effective as a component and to attain status in the market place after the vehicle has left the dealership.

The Court: Is that the reason that the aftermarket in spark plugs follows the original equipment?

Mr. Shapiro: Yes, your Honor; that is one of the reasons. And the technological reason is probably complicated for someone who understands it, but for me it's fairly simple, and that is that every engine has a heat range, and in order for a spark plug to function properly [41] in that engine, it has to have an appropriate heat range for that purpose, because if the spark plug burns too hot, it may pre-ignite, and if it pre-ignites, it will harm the engine seriously. If it burns too cold, it won't burn out or burn off the accumulating residues and the tip will foul and will not function properly. So that the spark plug has to be attuned, from a heat range standpoint, to the particular engine in which it is designed to function.

Opening Statement of Jerome G. Shapiro, Attorney for Ford Motor Company

Now, it is in part because of this heat range problem, because it is prudent for the mechanic installing a spark plug at the retail level, it is prudent for him to install the spark plug which bears the same brand and which is of the same type as the spark plug that was placed in the vehicle as original equipment, because the chances are it will function better. But in addition to that, the mechanic, as a human animal, wishes to avoid unjustified criticism. Sometimes if an engine malfunctions, the owner might take the vehicle into another service station than the one that installed the spark plugs during a tune-up, and the mechanic will look under the hood and he'll see spark plugs that are not original equipment ones, and he'll say, "Well, of course your engine is malfunctioning. Who put that set of spark plugs in your car, It's the wrong set of spark plugs." So the mechanic, in order to forestall and avoid that kind of situation, feels perfectly safe and [42] customarily does install the same brand and type as was originally in the engine. And that matter is not in dispute here. Your Honor heard this morning Mr. —

The Court: No; I understand you agree on that.
Mr. Shapiro: Yes, we agree on that.

• • • • •

[55] Your Honor, in this case, for the Government to prove that Ford Motor Company would have entered the market by internal growth, and that Chrysler would not, is insurmountable.

There are three reasons for that. In the first place, Ford Motor Company knew, as did everyone else in the sparkplug industry, that if Ford Motor Company constructed its own spark plug facility, the spark plug indus-

try would have been in a condition of over-capacity to the extent of the Fostoria production in excess of what could [56] reasonably be expected of a company without major OE status.

That concept, that fact, that internal growth would have created vast over-production in the industry, with attendant effects on the market, would have been a substantial deterrent to Ford Motor Company in any consideration of whether to enter or whether not.

Secondly, if Ford Motor Company were on the verge of constructing its own spark plug facility, its supplier, Champion, would have known this. And Champion would then have had a very strong incentive to come to Ford and offer it economic incentives that were unrejectable.

Third, Ford Motor Company knew that it would take years before it could develop a technological position in the spark plug industry equal to Champion and that, having done so, it would take additional years to build up an after-market expectation by installation of original equipment spark plugs under a Ford-owned trade-mark that would result in a volume that would make the business profitable.

[57] So Ford had the prospect, your Honor, if it went in by internal growth, of an industry of overcapacity, of a tremendous time lag before it could have a profitable operation—and I'm talking about years—as well as the countervailing, balancing situation of an offer by Champion of unrejectable economic incentives.

* * * * *

[59] Your Honor, the shoe is precisely on the other foot. Champion is more dependent on Chrysler now that Chrysler is the only major OE potential for Champion

Opening Statement of Jerome G. Shapiro, Attorney for Ford Motor Company

[60] than ever it was before. Champion sold spark plugs for replacement purposes to Ford at a price higher than Champion is now selling replacement spark plugs to Chrysler. That was a bargain that Chrysler exacted and that Champion accepted after Champion had become the sole independent.

Secondly, Ford Motor Company had requested Champion to supply it with private label spark plugs and Champion had refused. Champion is now supplying Chrysler with MoPar spark plugs, private label spark plugs, 25 per cent of their requirements, which they did not do for Ford.

• • • • •

[86] Your Honor, I am talking about decisive competitive advantage rather than economic benefit. Ford Motor Company paid a price for the Autolite trademark. It paid a handsome price and it was getting something for it. We are not denying that, your Honor. Ford Motor Company bought an asset, an intangible asset, to be sure, but a valuable intangible asset. It paid money for it.

But, your Honor, this did not give Ford Motor Company a decisive advantage in selling Ford parts in the after-market.

Now, in connection with selling all-make parts in the after-market, you may get a little more demonstration of what kind of advantage or non-advantage Ford is getting. Ford has been selling an all-make line, or, at least offering—I must qualify it by saying offering an all-make line in the after-market under the Autolite trade-mark. Year after year, Ford Motor Company sales have not exceeded one million dollars in the all-make line under the Autolite trade-mark. And they have been selling it; they have been offering it.

Opening Statement of Jerome G. Shapiro, Attorney for Ford Motor Company

Your Honor, an examination of the history of General Motors in the all-make after-market gives you an insight as to what Ford can expect. General Motors had not until 1959 been in the after-market with [87] an all-make line. They first started in 1959.

Now, when General Motors started, they started with Delco, which was a name that I think on any comparison, is a better name or a name that was more accepted in the after-market than Autolite, if only for the reason that General Motors had fifty percent or more of the cars on the road. Delco had been original equipment on General Motors for years and was very well known in the trade, had been very well supported in the after-market. Not only that, but General Motors started with a distribution system that consisted, among other things, of 26 warehouses, so that General Motors did not have to go through the AEA, did not have to go through a warehouse distributor which was independently owned and which handled other lines. General Motors was able to sell directly to the jobber out of its own warehouses, which is called the two-step system. General Motors was in the after-market with that.

So, it had its name; it had its distribution system, and in addition to that, General Motors obtained practically an exclusive position in what is known as the TBA. Firestone, Goodyear, they had the General Motors line of parts, and all service stations—there are 350,000 service stations—all the service stations that go to jobbers for their parts, were exposed not only to [88] the regular jobbers, but also to these TBA sellers and the TBA line of distribution through the tire companies and the oil companies and General Motors had that position almost to the exclusion of everybody else.

Opening Statement of Jerome G. Shapiro, Attorney for Ford Motor Company

And yet, your Honor, the proofs will show that General Motors' sales of all-make parts have remained relatively small, compared to its Delco-Remy original equipment replacement business.

So, if General Motors has not been able to do it in that five years or six years with the starting point that it had, to be sure Ford Motor Company will not be able to gain a decisive advantage in that all-make after-market on the basis of anything that it acquired from Electric Autolite. That is all we are saying.

We are not deprecating the assets acquired. We are not saying that value was not received. What we are saying, your Honor, is that from an antitrust standpoint, from a Section 7 standpoint, it is not benefit but decisive advantage that we are talking about and Ford Motor Company has obtained no decisive advantage in any respect from anything that it purchased from Electric Autolite.

• • • • •

Testimony of Harry F. Davis, Vice President in charge of sales and General Sales Manager of Champion

DIRECT EXAMINATION

* * * * *

[692] Q. Now, do you make one or more—do you make one or more spark plugs, one or more different types of spark plugs each year? A. Yes. We make in the area of about 300 different types.

Q. And why do you make these various types? A. Because of the requirements of the specific engines they are manufactured for, we tailor spark plugs to each individual type of engine.

Q. So that a spark plug for a Chevrolet might not fit on a spark plug for a Ford, is that it? A. That is correct.

Q. And this would even be true among different Ford vehicles? A. That's correct. Various engines that pertain to Ford models would require possibly a different type of spark plug.

The Court: What modifications do you have to make in spark plugs to accommodate the requirements of the various engines? Could you just tell me generally without—

A. (Interposing) Well, as Mr. Shapiro said in his opening statement, the engine has given requirements, and the thing that you must worry about in the spark plug is the pre-ignition range, the range where the spark plug would get too hot, or the fouling range, the area in which the spark plug would get too cold. They vary from about [693] 700 degrees, normally, as the fouling point. If the plug runs below that you will pick up a lot of carbonaceous deposits and you will get a skip at low speed. Conversely, if your plug runs beyond 1800 degrees, in the firing tips,

and the electrodes get hot and they pre-fire the mixture, then you are in pre-ignition and this is a very destructive position, so you must tailor that spark plug for that specific engine so that it will operate normally between a range of 700 degrees low and 1800 degrees high.

Q. (By Mr. McManus) Who are the major manufacturers of spark plugs in the United States? A. Currently, there is Champion, of course; A-C which is a Division of General Motors, and Autolite, which is Ford. They are the principals. There are many others but—

Q. (Interposing) Would you tell us some of the others that you can call to mind? A. Well, you have Prestolite, which is the present Eltra Division. You have General Battery and Ceramic, who make many private brands. And they are about, fundamentally, the major ones. You have Zeller Corporation in Defiance, but they, too, are private brand manufacturers.

Q. Now, I think the record shows that for a period of years, quite a number of years prior to April, 1951, at least, you were a supplier of spark plugs to the Ford Motor Company; is that correct?

[694] The Court: Did you say April—

A. (Interposing) '61.

Mr. McManus: Excuse me. April, '61.

A. '61.

The Court: I thought you said '51.

Mr. McManus: I must have misspoke, your Honor. I meant to say '61.

The Court: You meant '61.

Q. (By Mr. McManus) Is that correct? A. That is correct.

The Court: Excuse me. What was your question there again?

Mr. McManus: Maybe I will ask the question again.

Q. (By Mr. McManus, continuing) I think the record shows and could you tell me if it is true that prior, at least, to April, 1961, you were supplying spark plugs to the Ford Motor Company? A. That's correct.

Q. Now, could you tell me what were your contractual relations with the Ford Motor Company in supplying these plugs? A. Well, it was actually a contract that recreated itself every year. We had to negotiate a separate contract each year. But, excluding the possibility of a price change, either up or down, we would just automatically continue [695] to do business with Ford at the stipulated prices.

Q. Were you ever aware, or were you ever informed by Ford officials that any other spark plug manufacturer was attempting to acquire this business? A. Yes, sir. There were numerous occasions, oh, a few years preceding 1961, where we knew that Electric Autolite Company was very seriously trying to obtain the Ford business, the Ford spark plug business.

Q. Are you presently a supplier of spark plugs to the Ford Motor Company, in the United States? A. No. No, sir.

Q. Approximately when did this, your sales to Ford, cease? A. We stopped shipment of service plugs, those that they resell, immediately when they informed us of their purchase of the Autolite Company, and we agreed, in the interests of keeping their production lines going, that we would provide them with original equipment plugs for an additional two months. So that I would say—that was April—May, June, about July was the termination of our dealing with Ford in the United States.

Q. That would be July of 1961? A. That's correct.

Q. When and how were you informed of Ford's acquisition of the Autolite spark plug? A. Their purchasing people called us and told us that they [696] had acquired the Autolite Company.

Q. This was before or after the acquisition? A. This was immediately after the acquisition. We had no knowledge of it prior to then.

Q. Now, at the time of the acquisition, were you selling spark plugs to Ford abroad? A. Yes, sir.

Q. And where was that? A. We were selling them in England; we were selling them in Canada; we were selling them in Mexico; we were selling them in Brazil.

Q. Are you still selling—

The Court: (Interposing) Are you saying that was before?

A. That was before, your Honor.

The Court: But to Ford?

A. To Ford; yes, sir.

Q. (By Mr. McManus) Are you still selling spark plugs abroad to Ford Motor Company? A. We have two areas left. We are no longer in Canada, we are no longer in England. But we still do provide some spark plugs for them in Brazil and Mexico.

Q. Now, in Brazil and Mexico, are those automobiles manufactured there? A. They are manufactured there, and the provisions of the

[697] The Court: You're saying, then, all of the plugs that you sell to Ford in those two countries are used in cars that are built in those countries?

A. Manufactured in those countries, yes, sir.

Q. (By Mr. McManus) Now, do you make spark plugs for all American automobiles—for use in all American automobiles? A. Yes, sir.

Q. Now, is it necessary for you, when a new model comes out, for you to qualify your spark plug on that new model? A. We must.

Q. Now—

The Court: How do you go about to do that?

Mr. McManus: I was going—

The Court: Oh.

Mr. McManus: Go right ahead, your Honor.

A. Well, it's rather difficult in our position, being the lone independent in the business, because we have no access to Ford's engineering nor do we have to General Motors' engineering, and consequently, we have to wait until they've actually produced the car. Then we scurry out and buy one of each model, take it into our own laboratory and determine what Champion plug shall fit that particular engine; and many times we don't agree with those that they put in originally. We believe that we can design a plug that will fit the engine sometimes better [698] than the original equipment plug.

The Court: You're not given specifications for the plugs in advance by the automobile manufacturer?

A. Not at all, sir.

The Court: You develop that yourselves?

A. We develop that ourselves.

Q. (By Mr. McManus) Now, at the present time are you selling plugs to any automobile manufacturer? A. We sell currently to Chrysler and to American Motors Corporation.

Q. Now, in regard to, say, Chrysler, for example, do you obtain any advance information on their new models? A. Very definitely, yes.

Q. Could you explain generally how that comes about? A. Well, normally a new engine that's used is engineered probably two to three years before its actual introduction into the vehicle, and consequently, we work with them and help them develop the plug that is suited for that particular engine, and in the case of Chrysler, we have advance knowledge of what their engines require. But in the case of Ford and GM, we don't until we get the actual vehicle, where we can get the engine and tailor our plug for it then.

Q. Now, at the time that you were selling to Ford, did you get this same type of advance information? A. Very definitely. We helped them develop plugs for new [699] engines that wouldn't make their appearance in a vehicle for a couple years.

Q. Now, when this information was given to you, was it for general circulation or was it considered confidential information? A. Very definitely confidential.

Q. Did they so inform you? A. Yes.

Q. Is this also true in regard to your arrangements with Chrysler and American Motors? A. Very definitely.

Q. Since 1961, are you aware of the use of Champion spark plugs in any racing cars built by the Ford Motor Company? A. Yes, but I must qualify that. Those in which they have no financial interest, we have been very successful in having Champion spark plugs installed and used. But in the racing business today, they do have contractual arrangements with certain drivers, and part of the contractual arrangement is that they must of necessity use the Autolite plug.

Q. Have Champion plugs ever been used in any of the General Motors cars that were used for racing? A. Oh,

very definitely. We had a very pleasant experience in that area, because at the NASCAR races—let me go back a minute.

> The fact that Mr. Shapiro brought out in his [700] original statement here, that OEM influences aftermarket, we were very cognizant of that, and knowing that the vast percentage or the fact that GM represented the vast percentage of the cars that made up the American market, and the fact that all of those were constantly using AC plugs as original equipment, we had to find a way to combat that. So we went racing, if you want to use the word, and fortunately the people that raced the General Motors products invariably felt that our product would operate better, and consequently they used them and we publicized that fact so we could persuade the consumer that it was perfectly safe and, in fact, desirable to use a Champion spark plug in a General Motors product.

Q. Now, do you know that actually your spark plugs in which you are original equipment supplier to Chrysler, are your spark plugs also used in General Motors and Ford automobiles by the ordinary individual? A. Oh, yes. We predominate the market, and consequently we have to sell in great numbers to General Motors and Ford owners to maintain our position of dominance.

Q. Now, other than sales to original equipment manufacturers, what other channels of distribution does your company use? A. Well, basically the greatest single outlet we have are the hard parts distributors and jobbers who buy from the warehouse distributors. Then we have the major oil companies [701] and we have the rubber companies. We're very comparable to the Electric Storage

Battery people in the type of markets that we sell our product through.

Q. Now, you talked about warehouse distributors? Did you mention those? A. Yes.

Q. Does the quality of warehouse distributors in this country vary? A. Oh, very definitely. You have good ones and bad ones.

Q. Is it important, in selling your product, to have good ones? A. We try to be very selective. We have far fewer distributors than our major competitor, AC, but we believe that we have the select ones, the better ones.

Q. Do you have an opinion if, in obtaining warehouse distributors, it's an advantage to have a full line of products or a single line of products? A. No, we're somewhat at a disadvantage there. It's definitely an advantage to have a complete line. I think you have reference to spark plugs, ignition, possibly fuel pumps, as General Motors distributors have, or AC and Delco distributors have.

The Court: Now, wait a minute. Full line of what?

Mr. McManus: Well, a full line of ignition-type products, as he testified to.

[702] Q. Now, today, as the testimony here has brought out, Eltra, who is selling spark plugs under the Prestolite brand,—are you aware of the warehouse distributors that they have? A. Yes. They are very ineffective to date. I don't know what the future will bring but they have a, I would say, a lesser caliber warehouse distributor than either ourselves or AC or Autolite.

Q. Now, as I understand your testimony, you indicated that you ceased selling plugs to Ford in the summer of 1961? A. That is correct.

Q. When you were informed by Ford that they had bought the Autolite spark plug facilities, what did you do in order to acquire any other OE business? A. Well, we knew it was paramount to have the overtones of original equipment so we immediately redoubled our efforts to get the business at Chrysler because we did have American Motors and this was the end of the passenger car market for us. So we immediately went to work on Chrysler and ultimately were successful in selling them.

Q. Did you approach Chrysler? A. Very definitely, yes, sir.

Q. Did you have any assurance when you approached them that you would get this business? [703] A. Not the slightest.

Q. Prior to April of 1961, who was your largest customer for spark plugs? A. Ford Motor Company.

Q. Are you aware of any companies buying spark plugs that purchase more spark plugs than the Ford Motor Company? A. Well, the only—naturally, the General Motors Corporation would purchase more spark plugs than the Ford Motor Company because they build more cars.

Q. Do you know of any customer who does not manufacture his own spark plugs who would be a larger customer than Ford Motor Company? A. There is none.

Q. When I am asking you this question, I am including either a customer who is buying for original equipment or a customer who would be buying for the replacement market. A. That is correct. There is no one larger than the Ford Motor Company, beyond G.M.

Q. Have you ever seriously solicited G.M. to sell them spark plugs? A. Not seriously. We have done it as a defense maneuver on occasion just to keep AC busy while we were trying to get something else.

Harry F. Davis—Direct Examination

Q. Have you ever been successful in getting any of their business? [704] A. No. No, sir.

Q. Do you know why you haven't been successful in getting any of their business? A. They have their own spark plug division and it is very natural for them to use it.

Q. Now, in your opinion, has Ford's acquisition of the Fostoria plant increased or decreased the likelihood of a substantial new entrant into the manufacture of spark plugs?

The Court: Excuse me. Will you state that again so that I can understand that question, or have it read.

Mr. McManus: Surely, your Honor.

Q. Has Ford's acquisition of the Fostoria plant of Electric Autolite in your opinion increased or decreased the likelihood of any substantial new company coming into the manufacture of spark plugs? A. Well, I think without question it has decreased it.

Q. Why would you say that? A. Well, with Ford having its own spark plug company and General Motors having its own spark plug company and Chrysler doing business with the Champion Spark Plug Company and American Motors doing business with Champion, there is very little left for any other company. And, then, in addition, it is a well known fact that spark [705] plugs are bought for original equipment at less than manufacturing costs, so it would be pretty impractical for one of the lesser spark plug companies to attempt to get in that business when the only way they can get in is by furnishing spark plugs at less than what it cost them to manufacture them.

Q. Since the Ford acquisition, has your company been approached by any of the other automobile manufacturers, looking forward to a merger? A. No, sir.

Q. Is your company concerned that Chrysler may enter into the manufacture of spark plugs? A. That is a distinct concern on our part because we have—being independent and having no affiliation with them, it is completely possible that should we not serve them well or price correctly to them, that they could go to another spark plug manufacturer; and the very definite one that they have used in negotiating with us is the fact that they might buy from the Prestolite Company, if our arrangements aren't satisfactory.

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CROSS EXAMINATION

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[711] Q. I understand. Now, I think you said on direct examination that your sales of spark plugs are quite substantial currently, is that correct? A. That is correct. We are doing very well in the after-market, but, naturally, in the OEM field, our sales are a little bit off because of the loss of the Ford [712] business.

Q. In the OEM field, the difference in your business is the difference between Ford Motor Company and Chrysler production, isn't that correct? A. That is correct, yes, sir.

Q. You have, in effect, made a switch of customers from Ford to Chrysler, isn't that right? A. Right. And Chrysler enjoys a lesser share of the market.

Q. Do you know whether or not your current sales are as great as AC's current sales in the after-market? A. In the after-market I believe they are greater.

Q. You do? A. Yes, sir.

The Court: What was that question again, please?

Mr. Shapiro: I asked, your Honor, whether Mr. Davis knows whether Champion's sales are greater or lesser or how they compare to AC's in the after-

market, and he said he believes they are greater. Is that correct, Mr. Davis?

A. That is correct.

Q. Well, now, you mentioned that you have two ceramic plants, Mr. Davis. Where were they, again? A. One is in Detroit and the other is in Cambridge, Ohio.

[713] Q. When was the Detroit plant constructed? A. Oh, that goes way back in history, prior to my time. But I would believe that it came into being about 1916—maybe '16 or '17.

Q. Have you done any enlargement of that facility within the last few years? A. Not in the last two years. We are currently just about to break ground for a brand new plant in Detroit that will have increased capacity.

Q. Ceramic capacity? A. Ceramic capacity.

Q. When do you expect that plant to be finished? A. I believe it will be ready for production at the end of this year of 1967.

Q. Is that site near the current Detroit plant, or is it far away? A. It is out in the Eight Mile area of Detroit, and I can't tell you specifically what the address is. But out in that general area. It is quite removed from our present facility.

Q. You are not planning to close down your present facility, are you? A. Only after the new one is in operation. Yes, we will close it down then.

Q. Do you expect the new plant to equal or exceed the cap- [714] acity of your present plant? A. The only reason for building it, we will exceed the capacity of this present plant.

Q. You feel the need of larger ceramic capacity, is that correct? A. That's correct.

Q. Now, in talking about your competitors, I think you said your major competitors were A-C and Autolite; is that correct? A. That's correct.

Q. And I think you said that your major competitor, as between those two, was A-C? A. That's correct.

Q. And you said that there were other competitors, Prestolite, GB & C, and Zeller. Is that correct? A. That's correct.

Q. Now, when you mentioned Prestolite, I don't know whether it was clear that you were talking about both the Prestolite brand and also private labels. Do you know whether Eltra produced both Prestolite and private labels? A. They very definitely do. They produce Prestolite and they have numerous private brands.

Q. Now, I think you testified during the time you were supplying Ford, Electric Autolite made attempts to get Ford's business from you. Was that something that happened more [715] than once? A. Oh, yes. That was a constant effort on their part, for four or five years prior to the acquisition.

Q. And you were successful in maintaining 100 percent throughout that period, isn't that correct? A. That's correct; yes, sir.

Q. Well, now, you were able, were you not, to offer Ford greater advantages as a supplier than Electric Autolite was, isn't that correct? A. That's correct.

Q. And isn't it true that you would have been able to offer Ford more advantages as a supplier than some new company that might come along? Isn't that true? A. Very definitely.

Q. So that, really, you were not in danger of losing the Ford Motor Company business to some other supplier during that time, isn't that true? A. That is true.

Q. So that if a new company had come into the market with spark plugs, the chances are very unlikely, aren't they, before 1961, that they could have become original equipment on any major vehicle? Isn't that correct? A. That's correct, because of the tremendous job that Ford was doing in reselling our spark plugs. The original equipment business is desirable because it gives you a shot [716] at the after-market. But the after-market is the profit area on which you operate and we, in conjunction with Ford, had built their service volume in the after-market to a point where it was very profitable for them and equally profitable for us.

Q. Well, I take it, then, that you were not concerned until you learned of the acquisition that Ford Motor Company would integrate manufacture and push you out? A. We were concerned about Autolite getting in there, because there was no actual affiliation, no financial arrangements between Ford and Champion, and we had to sell them a quality product and service them well to retain that business. And if Autolite had been able to persuade them that they could have done as well or better, our account would be in jeopardy. It is different than GM and A-C, because A-C is a Division of GM. Now Autolite is a Division of Ford.

Q. Well, aren't you now in the same position with Chrysler as you were at Ford, where you feel you have to give them a quality product at a good price in order to stay in? A. We are very vulnerable at Chrysler. I mean we don't rest on our laurels any single day, because we know that we have the specter of Prestolite in the backgroumd willing to battle us for that business, and we have no ties with Chrysler other than a good product sold well and their [717] selling well.

Q. Do you feel that Prestolite is a serious threat at Chrysler; is that right? A. I sincerely do.

Q. Do you think that there is any other potential supplier of Chrysler besides Eltra that you are concerned about? A. No. Car manufacturers as such want absolute quality. They have to have it to sell a quality product. And I don't believe, after you pass the area of Champion, A-C, Autolite and Prestolite, that there is a real quality manufacturer that they would turn to.

Q. Well, getting back to the possibility, while you were supplying Ford, that Ford might integrate, did you feel during the course of that or suspect that they might build their own plant and push you out? A. Oh, we had some whisperings here and there over our fifty years of association that they might entertain the idea of going in the spark plug business. But we felt that if we could continue to service them as we were, at a price that was satisfactory to them, with a quality product, that we could retain their business, and we were successful in doing that for fifty years.

Q. And the fact that you were selling them original equipment spark plugs below cost was a substantial factor in that, wasn't it? [718] A. It was sort of an insurance.

Q. Now, Mr. Davis, since the acquisition in April of 1961, have Champion's sales of spark plugs gone up or down? A. They have gone up in the total, but in original equipment they have gone down.

Q. I understand. How about your net sales as a company? Have they gone up or down? A. They have gone up.

Q. How about your net earnings as a company, have they gone up or down? A. They have gone up.

Q. Is it true that your net sales in 1965 were the highest in your history? A. That's correct.

Q. And is it true that they have gone up every year from 1961 to 1965? A. That's correct.

Q. And is it true that your net earnings in 1965 were the highest in your history? A. Yes, sir.

Q. And is it true that they have gone up every year from 1962 to 1965? A. Yes, sir. But I must qualify that, if I may, because if you aren't doing that you are standing still, and when you are standing still you are going backwards. The after- [719] market industry increases on an average of six percent a year, so from '61 to '67 we would have to have something in the area of about a 35, 36 percent increase over '61, currently, or we would have lost our share of the market.

Q. Well, apart from your share of the market, don't you have a 14 percent—or didn't you, in 1965, have a 14 percent ratio of net earnings to net sales? A. Yes, sir.

Q. That is a pretty good ratio, isn't it? A. It's one that we have to, not apologize for, but explain constantly.

Q. You are a strong company, aren't you, Mr. Davis? A. Very.

Q. Now, Mr. Davis, let me ask you a question about—you testified that the fact that Ford acquired Fostoria had some effect on possible newcomers; is that right? A. That's right.

Q. Well, as I understand it, however, the chance of a newcomer coming in, even before the acquisition, in an original equipment situation, was very, very small; isn't that correct? A. Very small; yes, sir.

Q. Well, now, suppose that instead of acquiring Fostoria Ford Motor Company had built a plant of its own and left Electric Autolite with the Fostoria plant and had dis- [720] placed Champion as original equipment to Ford by virtue of its own manufacture. Would Champion have been in a better or a worse situation than it is today? A. I think Champion would have been in a better situation than it is

today, for the simple reason that had Ford developed its own spark plug without any known aftermarket distribution, such as they acquired when they acquired Autolite, it would have taken Ford much longer to make a penetration of the market with its own product than it would have—than it has since they have acquired the Autolite, because Autolite had some established distribution that Ford got in the process of the acquisition, and unless they had gotten that they would have had to go on and create their own in the after-market.

[721] Q. And that would have taken quite some time? A. That would have taken quite some time.

Q. They not only would have had to develop their own distribution, but it would have taken some years, would it not, before the original equipment vehicles were starting to use replacement spark plugs in the after-market; isn't that true? A. Yes. There's a rule of thumb that it takes about 18 months before the average new car reaches the position where it requires new spark plugs.

Q. And before you have a population of vehicles on the road that are requiring substantial replacement, you have several years go by, don't you? A. I would say about 18 months.

Q. Well, that's for one year's production. A. Right.

Q. But then in order to have— A. You're right. You're right.

Q. Wouldn't it take six to eight years before you had enough vehicles on the road to justify a substantial sales organization? A. Yes, I think that's valid.

Q. One thing, Mr. Davis. Mr. Hartig of Chrysler testified on deposition that Chrysler's price of replacement spark plugs from Champion now was in the high twenties, and I [722] wondered whether you could be a little bit more

specific on the price that Chrysler pays you for replacement spark plugs? A. Well, I think Mr. Hartig, who certainly should know, is in error, because we're under a cease-and-desist order from the FTC and we must sell everybody on a like basis . . .

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[737] Q. Did Champion, prior to 1961, have a policy against supplying private label spark plugs to major automobile manufacturers? A. Yes.

Q. You wouldn't have supplied a private label spark plug to Ford, for example, before 1961, would you? A. Oh, I think because of the size of the Ford account we would have entertained the idea; yes, sir.

Q. Well, weren't you asked on one occasion or more to sell private labels to Ford, and didn't you say you would rather not do that? A. We do that with any major customer. We are of the opinion that we would dilute the name "Champion" if we get too much private brand business, so on every occasion we try to discourage them from buying the private brand.

Q. You do, however, sell some private brands to Sears & Roebuck, Montgomery Ward, and Atlas; is that correct? A. Yes, sir.

Q. Do you know what date you started selling your private brands? A. Well, Sears-Roebuck, we have been selling them for about ten years. And Montgomery Ward, we have been selling for approximately the same time. Atlas, that is of more recent [738] origin. That has been about three years.

The Court: Is that Standard Oil?

A. Standard Oil; yes, sir.

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Testimony of Wilson Brumback, Engineer in the spark plug plant of the Prestolite Division of ELTRA Corporation located at Decatur, Alabama

DIRECT EXAMINATION

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[744] Q. Now, are you concerned with the complete manufacture of spark plugs—do your duties cover the complete manufacture of spark plugs? A. Yes, sir.

Q. Do your duties also cover the manufacture of or the purchase of ceramics by your company? A. Yes, sir.

Q. I would like to refer you to Government Exhibit G-20, which I believe you have a copy of. A. Yes, sir; I have one.

Q. This is Government Exhibit G-20 for identification. Referring you to the first written page, this document is dated May 28, 1962, and it is addressed to Mr. R. H. Davies, or who was Mr. Davies? A. At that time he was president of the company.

Q. And there were copies to—could you tell me who these other gentlemen were? A. Yes, sir. Earl Fiene is vice-president of sales; Robert Twells was a consultant at the time, had been the manager of the Fostoria plant, vice-president of the spark plug division; E. R. Koppel was vice-president of the Electrical Products Division; R. O. Boden, plant manager of the Decatur plant; W. F. Purves was plant manager of the Sarnia, Ontario plant; and J. J. Bohmrich [745] was vice-president of the International Division.

Q. Now, the subject here is: Ceramic Manufacturing Facility. Was this memorandum prepared by you? A. Yes, sir.

Q. Were you directed to prepare this memorandum? A. Yes. sir.

Q. Who directed you to prepare it? A. Mr. Davies.

Q. Was it the normal course of your employment to prepare a memorandum of this type? A. Yes, sir.

Mr. McManus: Your Honor, the Government offers G-20.

Mr. Shapiro: No objection, your Honor.

The Court: All right. It is received.

Q. Now, this was a proposal to establish a facility for the manufacture of ceramic insulators for spark plugs; is that correct? A. Yes, sir.

Q. At that time, in 1962, was the Eltra Corporation—was it the Eltra Corporation then, do you know? A. I believe so. I would have to check the dates.

Q. Eltra or the Electric Autolite? A. Eltra or the old Electric Autolite.

Q. Was it engaged in the manufacture of ceramics for spark [746] plugs? A. No, sir.

Q. This was a proposal recommending that Eltra go into the manufacture? A. That is correct.

Q. Was this proposal ever carried out? A. No, sir.

Q. Do you know why the proposal was not carried out—were you informed? A. Yes, I was informed that since there were sources of supply which the company was using, it wasn't felt that the expenditure of money would be appropriate at that time.

The Court: What was the reason, please?

A. Because there was an existing source of supply, they didn't feel that the expenditure of the money would be appropriate.

Q. Do you know at that time who your sources of supply would be? A. Ford Motor Company, primarily. There were some others,—a Japanese company was furnishing insulators to our Sarnia plant; and the Frenchtown Porcelain Company.

Q. Now, I gather from your memorandum that the acquisition of insulators from Japan was not satisfactory because of communications problems? [747] A. That is correct.

Q. I also gather from your memorandum that the Frenchtown insulators were not of good quality? A. Not of the quality that we were accustomed to. That is correct.

Q. Today,—I don't know if you answered this—who are you purchasing ceramics from? A. Ford Motor Company.

Q. Do you purchase from anyone else? A. No, sir.

Q. Do you know of any other manufacturers of ceramics that might possible be suppliers to your company? A. There are some possibilities, although we haven't done any looking, serious looking, for quite some period of time. Frenchtown is still in business. Zeller, in Defiance, Ohio, makes insulators and I think would be a possible source. Carborundum is also a possible source. They do make some insulators.

Q. Do you know if the quality of Frenchtown has improved or not? A. No, sir; I don't know.

Q. Do you know if the quality of the other companies that you mentioned has? A. No, I don't, only by general reputation.

Q. Do you know what the general reputation is? [748] A. Carborundum's is excellent and Blue Crown, I would say, or Zeller, is essentially the same.

The Court: What was that name, the first one?

A. Blue Crown.

Q. Do you happen to know the capacity of these companies for making ceramics? A. No, sir.

Q. You don't know if it is high or low; is that correct? A. In terms of Champion and AC being high, it is low.

Q. I see. A. In terms of being adequate for our needs, I can't tell you. It would be fairly close, in any case.

Q. Do you know, does Carborundum make ceramics for spark plugs? A. Yes, sir.

Q. For whom do they make them? A. They make them for a couple of small companies. One is Stitt in Columbus, Ohio, and the other one, I don't remember the name of, a relatively small company.

The Reporter: The name of that company, sir?

A. Stitt, (spelling) S-t-i-t-t.

The Court: You see, the Reporter is not familiar with these names and neither am I. The names [749] mean nothing unless you are a little more deliberate about giving the names.

A. All right, sir.

Mr. McManus: Those are all of the questions that I have of this witness, your Honor.

The Court: All right. Cross-examine.

CROSS-EXAMINATION

By Mr. Shapiro:

Q. Mr. Brumback, have you ever had any experience or responsibility in the sales end of the business? A. Only from an engineering-sales standpoint. I have made some calls on engineering departments of various companies, yes, sir.

Q. But you haven't had sales responsibility in the after-market or sales responsibility in selling through distribution channels of one kind or another? A. No, sir.

Q. Did you consider when you wrote the memorandum which has been marked G-20 that Eltra or Electric Autolite,

whatever it was then, had the capability of establishing a ceramic operation? A. Yes, sir.

Q. You felt you had the financial capability as well as the engineering capability; is that correct? A. Yes, sir.

[750] Q. Do you believe, Mr. Brumback, that Eltra now has the financial and engineering capability to establish a ceramics facility? A. Yes, sir.

Q. Do you have any operation on-going now at Eltra which would be relevant to its establishment of a ceramics facility? A. Yes, sir. We have a laboratory process for making insulators in our Decatur plant. We have in submission state a similar proposal.

Q. I am sorry. I didn't catch you. A. We have a similar proposal to the one under discussion here, also being submitted to our management now.

Q. Currently? A. Yes, sir.

Q. And did you write a memorandum or any kind of recommendation, either orally or otherwise, on such a proposal? A. No, sir.

Q. Do you believe that this would be something that Eltra is capable of doing in the form in which the recommendation is being made? A. Yes, sir.

Q. Now, in the memorandum, G-20, on page 3, is a statement that:

> "Ford quality is satisfactory but de- [751] livery promises have not been, and currently are not being, met. Additional capacity at Ford, now expected by September, will probably solve this problem."

Will you state, Mr. Brumback, whether, after you wrote the memorandum, the delivery problem referred to was taken care of? A. Yes, sir; it was.

Q. And did you thereafter receive on-time and adequate delivery service on ceramics? A. Yes, sir.

Q. And you are receiving such delivery from Ford Motor Company at the present time? A. Yes, sir.

Q. Now, Mr. Brumback, on page 8 of G-20, the memorandum says:

> "By establishing a spark plug insulator facility, the company can earn 17.7% return on investment, strengthen its competitive position in the market place, and once again establish itself as a prominent factor in the spark plug business."

Would you explain what you meant by that? A. Yes, sir. I think that "return on investment" is pretty straightforward. The strengthening of competitive position in the market place refers to some questions that had been asked by customers about our establishment of a [752] ceramics source, and, therefore, our continuing the supply or availability of spark plugs to them. And I think the "prominent factor" refers to reputation in the industry and that any manufacturer making all of his own components is bound to have a better reputation than one who buys part of his components.

Q. You mentioned that customers had made inquiry. Was there any particular customer that you have in mind? A. Yes, sir. At that time, our largest customer was Atlas Supply Company which is Standard Oils of the various states. And they particularly had questioned this matter of insulator supply.

Q. Are they still a customer of yours? A. Yes, sir.

Q. All right. Who else supplies Atlas, if you know? A. Champion and General Battery.

Q. Now, you mentioned Frenchtown Porcelain Company. Is that the same as General Battery? A. That is a Division of General Battery; that's right.

Q. That company is General Battery and Ceramics, isn't it? A. That's correct.

Q. Now, on page 3 again of G-20, in the next to the last paragraph, you say:

> "Of the four potential domestic sources; Champion, AC, Ford, and Frenchtown; all are manufact- [753] urers of spark plugs in direct competition with The Electric Autolite Company. This not only puts the company in a poor and vulnerable competitive position, but also exposes any design or development work being done to the competition from whom insulators are purchased."

First, Mr. Brumback, could you say what you meant by "putting the company in a poor and vulnerable competitive position"?

Mr. McManus: Your Honor, I object to that question. I believe the document very clearly states what Mr. Brumback had in mind. There isn't any difficulty in interpreting that particular phraseology. The document speaks for itself.

The Court: Well, I don't know whether it does or doesn't. I think that the witness may answer the question.

A. "Poor and vulnerable competitive position" refers to, I think, any situation when you are buying any component from a competitor. You are doing a couple of things. You are giving the competitor a certain amount of profit out of your own organization, and you are giving the competitor a good knowledge of your schedule, what you are producing, how many, when; and if you get a new program coming in and you increase your schedule they will know this by your scheduling. So I think it is generally not [754] a desirable practice to buy from a competitor.

Q. Is that the reason that you are considering establishing your own ceramics facility, to make that additional profit and to have your own scheduling within the confines of your own organization? A. I don't know that "considering" is a good word for what we are doing and that is why I am hesitating on your question a little bit.

Q. Well, do you find you are in an adequate competitive position with circumstances as they are currently? A. Here again, I don't know how to define "adequate". We don't seem to be at anything like a tremendous disadvantage.

Q. Now, if you had volume that would justify an investment in a ceramic operation, what would be the attitude of management toward putting such a ceramics operation into effect? A. It's my opinion, if the volume were adequate, that their attitude would be in favor of the facility.

Q. Well, for example, if Chrysler were to give Eltra its original equipment business, what would Eltra's reaction be to that, in terms of ceramic facilities? A. Here again, it is my opinion they would go right ahead with the facility in that case.

Q. And they would be able to do that? [755] A. Yes, sir.

Q. Now, with respect to design or development work being done to the competition from whom insulators are purchased, that part of your sentence, what did you have in mind there? Any particular supplier?

The Court: What was that reference again?

Mr. Shapiro: It is the second half of the sentence on page 3, your Honor, that says:

"... also exposes any design or development work being done to the competition from whom insulators are purchased."

Q. (By Mr. Shapiro, continuing) Did you have any particular competitor in mind there? A. I think this one

again, you need to look at all of the various suppliers, but anyone with an engineering department doing less work than ours was doing, I would be concerned about this.

Q. What do you mean by "doing less work" than yours? A. Well, less develpoment work. Fewer engineers, smaller staff—this kind of thing.

Q. Would that be of concern with respect to Ford Motor Company? A. No, I don't think so.

Q. Would it be of concern with respect to Frenchtown? A. Yes, sir.

[756] Q. But you don't consider that that aspect is a problem with Ford Motor Company as your ceramics supplier? A. No, sir.

Q. Mr. Brumback, one further question. In connection with this consideration of a ceramics facility, or whatever it is other than consideration that is going on now, is that for a ceramics facility with the same or greater or lesser ceramics capacity than contained in G-20? A. It would be somewhat smaller than contained in G-20.

Q. Smaller than that in contemplation? A. Yes, sir.

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Deposition of Robert H. Davies, President of Electric Autolite Company 1959-1963, Chairman of the Board of ELTRA Corporation 1963-1964

DIRECT EXAMINATION

* * * * *

[851] "Q. Would you say that the principal business of the Electric Autolite Company in 1959 was the automotive supply business? A. Yes.

"Q. Did you have any special relationship with any of the vehicle manufacturers? A. Yes, we—we had a very close relationship with Chrysler Corporation, particularly prior to my coming there.

"Q. Do you have any idea what percentage of Electric Autolite's business was comprised of sales to Chrysler, just generally, in 1959? A. In 1959?

"Q. Yes. A. I'd say about 60 per cent.

"Q. Do you happen to know what percentage that was earlier, say, in 1955? A. I don't think it would be much different in 1955. It might have been a little more.

"Q. That estimate you gave us is a very rough one, I assume? A. Very rough.

> "It could be more, because I just happened to recollect, as you mentioned it, we did have more battery business from Chrysler back in the days—[852] whether it was 1955 or not, and prior—prior years we had more battery business than we had, and perhaps we had more bumper business, too, and a few other items. But as of 1959, we still had the full line of electrical equipment for Chrysler.

"Q. Is it fair to say, then, that the principal business of Electric Autolite was automotive business, and the principal automotive customer of Electric Autolite was Chrysler? A. That's right.

"Q. Now, did the Electric Autolite Company go into any automotive businesses that you know of at the suggestion of Chrysler? A. Yes, I understand we went into the spark plug business originally at the suggestion of Chrysler; and this is all hearsay because I was not there—we went into the bumper business because of Chrysler; went into the die casting business; and I believe also the wire business—wire and cable business.

"Q. How about instruments? A. Automotive instruments, no, I don't believe so. I think it was one of the original businesses of Electric Autolite.

"Q. Did you go into the metal trim business at Chrysler's suggestion? [853] A. I believe so.

"Q. Were any of the businesses that you went into, or that you were in, in which you supplied Chrysler, unprofitable to Electric Autolite Company? A. Yes; the bumper business, lithographing business, metal trim; at times the wire and cable business was not too good; I think the instrument business was definitely not profitable at the time I came with the company.

"Q. Do you have any idea why Electric Autolite was engaged in these non-profitable businesses? A. Well, the primary reason was the fact that we had what we call the main electrical package, which was the starter-generator, and coil, and voltage regulator, plus the spark plug business, which was kind of the heart of the business, and quite profitable when we had it with Chrysler, and because we wanted to service this customer we maintained these other businesses as a service to Chrysler, although I don't believe this was the original intention when we went into them.

"But once in them, we didn't want to get out because Chrysler depended upon us.

"Q. When you say Chrysler depended on you, did you depend upon Chrysler? [854] A. Oh, yes; we depended

upon Chrysler, mainly for that main heart of the business, so far as the electrical package and spark plugs were concerned.

"Q. Did you have any kind of an engineering relationship with Chrysler that was different from the ordinary vendor-vendee kind of relationship? A. Very close relationship; we acted almost as if we were a division of Chrysler, in having regular meetings with their engineering department and our engineering departments to a greater extent than is normal under general supplier relationships.

"Q. Did your advertising have any particular slant in the direction of Chrysler, or was it just brand advertising? A. Yes, it had a slant toward Chrysler; I think there have been some programs with Chrysler where we had put Chrysler in our ads, Chrysler cars and so forth.

"Q. Was there any element of personal relationships that was peculiar between your company and Chrysler? A. Well, this is again hearsay, but in the days prior to—to, I believe, 1955, 1954, in the early days of the company, Mr. Royce Martin, President of Electric Autolite Company, and Mr. K. T. Keller, had a—worked out several arrangements and were also at each other—held each other in great [855] respect, and I think this is how the relationship with Chrysler and Electric Autolite developed, and that's all.

"Q. In connection with the kinds of sales that you as a company made to Chrysler, I take it that some of the sales were for Chrysler's use in original equipment installation? A. Right.

"Q. Is that correct? A. Correct.

"Q. What is the term in the business that you use to denote that kind of sale? A. 'OE', or original equipment.

"Q. So when we talk about 'OE sales', you are talking about sales of parts to a vehicle manufacturer, which the

vehicle manufacturer installs in the new vehicle; is that correct? A. That is correct.

"Q. Did you also sell replacement parts to Chrysler for distribution by Chrysler? A. Yes, we did.

"Q. Could we call that kind of sale 'OE parts for replacement'? A. To their dealers; OE parts for replacement to their own dealers.

[856] "Q. And is that the only way that Chrysler distributed replacement parts that they purchased from you? A. I believe so. They have what they call a Mopar distributor, which they delivered the products to the Mopar distributor, and he distributed it to the dealers and the special accounts of theirs.

"Q. But the ultimate way of that merchandise getting to the consumer was through the Chrysler dealers; is that correct? A. That is correct.

"Q. Apart from usual sales to Chrysler of OE parts, and OE parts for replacement, did you make any other sales of replacement parts? A. Yes, we made sales in what was known as the 'after market', and this was through, basically, the Automotive Electric Association distribution method.

"Q. Were these also OE parts for replacements? A. Yes, they were OE parts for replacement.

"Q. What is an AEA warehouse? A. An AEA warehouse is one which distributes mainly original equipment parts to jobbers and to—sometimes directly to retail outfits, such as service stations, or—jobber is usually in between a warehouse distributor and a retail outlet.

"Q. Does the AEA, so far as you know, handle any [857] particular type of replacement parts? A. Well, in—originally, practically nothing but original equipment parts.

"Q. How was this in 1959; was that practically that way? A. This was the way it was in 1959.

"Q. And in 1961? A. In 1961, pretty much the same.

"Q. Have you ever, in the course of your business, had occasion to refer to what some people call the genuine parts or authentic parts concept of merchandising? A. I am sorry; will you repeat that, please?

"Q. Have you ever referred to or heard referred to the authentic or genuine parts concept of merchandising? A. Yes.

"Q. What is that? A. This is where the only parts that are distributed are those that are equal—excuse me—identical to the parts that are on the automobile and manufactured by the same manufacturer.

"Q. And is this concept something that is manifested through advertising and through an orientation of distribution, or in what way do you— A. It was identified indefinitely as—and by the—by the distributor himself, as being the authentic or [858] genuine part that was—the same as was on the automobile.

"Q. Did the Electric Autolite Company have an authentic or genuine parts orientation in their distribution patterns? A. Yes; practically all of our so-called after market distribution was on the authentic or genuine parts type of distribution.

"Q. Was this part of the same kind of orientation that the AEA warehouses had that you testified about? A. Yes.

"Q. In other words, the AEA warehouses sold virtually all original equipment parts for replacement? A. Right.

"Q. And you sold virtually all original equipment parts for replacement; is that correct? A. Right.

"Q. And you sold yours through the AEA warehouses; is that correct? A. That is correct."

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[875] "Q. Mr. Davies, you indicated that your spark plug—Electric Autolite's spark plug—was original equipment on Chrysler for approximately twenty-one years; A. That's right.

"Q. And that you knew of no other, and know of no other supplier; is that correct? A. That is correct.

"Q. Do you happen to know from your work in the business how long a period, and what period, Champion supplied Ford Motor Company? A. By hearsay, I have heard that it was almost fifty years.

"Q. Do you know when General Motors first acquired AC, and how long that relationship has lasted? A. AC comes from the words Albert Champion, which was the originator of Champion spark plugs and I am sorry, but I don't know the date when they started.

"Q. Does 1911 sound right to you? [876] A. It is a long time, and I think that would be in order.

"Q. So, as far as you know, up until, say, 1961, there had been no shifts in spark plug sourcing among the big three vehicle manufacturers, except for Chrysler, as we know, in 1937, for approximately close to fifty years? A. Right.

"Q. When you sold original equipment spark plugs for original equipment installation, what approximate price did Electric Autolite charge? A. Approximately six to eight cents, depending on what type of spark plug was used.

[877] "Q. Was the business represented by those spark plugs at the price of six to eight cents profitable business, as far as Electric Autolite was concerned? A. No, it was a loss business.

"Q. In other words, it costs you more to manufacture a spark plug than the six or eight cents that you charged for it? A. Correct.

"Q. Do you have any idea what the difference was, just generally— A. Well, I would say the cost at that time was in the neighborhood of, say, seventeen cents. And, of course, on the market, you would get—after market, the retail price was somewheres around seventy-five cents to a dollar and a quarter, I think it was.

"Q. So that you were selling substantially below cost for original equipment installation; is that correct? A. That is correct.

"Q. Why in the world did you do it? A. Well, mainly we followed the existing pattern when we got into the industry, and I believe that the reason it was done by Champion —who, I believe, inaugurated this particular practice—was the fact that in order to get a spark plug on an original—as an original equipment on a car, on a vehicle, [878] this gave you an entry into the after market; there was a tendency to consider that the spark plug was put in there under engineering specifications, and that it was wise to maintain the same type of spark plug—not only type, but make—in the same vehicle.

"Therefore, it gave you an entry into the after market, when we were an original equipment on the vehicle."

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[883] "Q. In other words, the spark plug sellers, the original equipment spark plug sellers, were in effect paying a price for whatever increment they got in the after market resulting from the fact of their OE status; is that correct? A. That is correct.

"Q. Did the spark plugs that you sold to Chrysler for replacement sales by Chrysler—were the prices different from the prices for OE installation? A. Oh, definitely, yes, they were different than the OE installation. They were a profitable item for us.

"Q. Then I take it that your sales in the after market of replacement spark plugs were also a profitable item, too? A. Correct.

"Q. So your willingness to sell below your cost was for the purpose of obtaining whatever benefit there was in the after market? A. Right.

[884] "Q. Both through Chrysler replacement sales and through your own replacement sales, for replacing original equipment with the same plug? A. Correct.

"Q. Same brand of plug? A. Correct."

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[909] "Q. I mean the supply for it; in other words, the purchase by Chrysler of parts for the 1961 model year would have ended when? A. Ended in June of 1961.

"Q. I see. A. Well, so that this was a—quite a large piece of our business, and, as I mentioned earlier, it was kind of the core of our relationship between Chrysler and ourselves. It was the biggest single volume of business we did with Chrysler, and—so that it represented to us a major shift in our thinking, because many of our other parts were—other things we were doing, such as bumpers, and the metal trim, and some of these others, were not on a profitable basis. Actually, there were only two areas that were on a profitable basis at the time when I came into the company, and that was spark plugs and the electrical parts.

"So the problems were somewhat severe.

"Therefore several things started in with [910] Chrysler; Chrysler had been deteriorating in the marketplace, over a period of time, which had even taken our electrical parts business downward from what it used to be; as their percentage of the industry decreased and they lost volume, we lost volume.

"And this was true in spark plugs, as well, although the relationship was a little different.

"Then also Chrysler was having some difficulties in the internal organization, which was widely publicized, and this gave us cause for concern.

"They—we weren't sure where they were heading and we depended on them, because of our relationship on spark plugs, particularly, which was our only major of the big three—the only major spark plug account that we had on original equipment, which is the vehicle in which you penetrate the after market.

"So that these were considered problems.

"Then also, having—Chrysler announcing the fact that they were going into their own electrical parts, this brought the problem on that our distribution in the after market was through AEA, which was dedicated to the sale of only [911] original equipment, authentic parts, and we were in competition with companies on the outside, Echlin, for one.

"They supply NAPA, which is National Automotive Parts Association, which is—does not make authentic parts or distribute them. They distribute parts only to that—that they manufacture for all cars, but they don't have any original equipment lines. They don't sell any original equipment manufacturer, were at one time considered gyp parts people. They became legitimate with time, and—as being a going business.

"And this presented a problem because we were—because we were only in the original equipment business. Our type of distribution would not allow us to produce so-called extended line parts. Parts for General Motors, parts for Ford, parts for cars that we didn't have the original equipment on. And this is where these other competitors of ours, the NAPA and a few others on the outside, could do this, because their distribution was extended distribution; they make parts for everybody's car where there were no patents particularly.

[912] "And so it became apparent that if we were to continue with AEA distribution, that we would go downhill, because our—the amount of original equipment we would have was going to decrease drastically when this contract came to an end.

"So that if you could consider the fact that the average life of an automobile may be seven to ten years—it used to be ten years, it is closer to seven now—that the parts life—our business would continue to decrease unless we could get other distribution—I mean, other original equipment to go on. And there wasn't too much left, because Ford was making their own; General Motors was making their own; and now if Chrysler would make their own, there wasn't really too much in the way of automotive original equipment to get. So this was a problem; we didn't know quite what we were going to do about it.

"Some other things, with the Chrysler going out of business, some of these other businesses who were not making money were going to have to stand on their own feet or we would have to get out of them, because now that the relationship was somewhat—it was different with Chrysler, we were no longer justified in maintaining [913] businesses that we couldn't make money in."

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[916] "Q. Why is that? Why didn't you know what was going to happen in the spark plug business? What was your fear in that? A. Several fears; first, what was happening to Chrysler at that time, this has nothing to do with the excellent management they have today. They were—it was publicly seen in the newspapers—they had major troubles internally.

"And there was a little tendency for them to not be able to get good answers out of them of what they were going to

do and where they were going to go. But it seemed logical to us, also, that if the integration that takes place sporadically in the automotive industry, that if they hadn't had their troubles, there might have been an inclination to go on further in spark plugs, maybe into batteries, maybe into other areas.

"Q. Did you have any specific information about the possibility of Chrysler doing something on spark plugs? [917] A. Not themselves. We did run into some peculiar situations, where we found out that Chrysler had requested bids from some other people.

"Q. Who did they request bids from? A. One was from Champion, at one time, and I believe—this is hearsay, now, was one—in fact, both of them are—but from, I think it was, Hastings, I believe.

"This difficulty of, also—now, this comes at a little later date; this comes after we began to realize this problem, that we were—we were so dependent upon, for our most profitable business in the company, Chrysler, that we felt we must somehow broaden this line, and this when we started to—we did build our advertising up for a period of time to see what would happen, would we get more sales by building up on advertising.

"We found a few things; we found that sales didn't specifically follow advertising immediately. You might—the big problem in the spark plug business is getting on the shelf of the retail outlet, such as the service station.

"And one of the other problems that this caused was the fact that the sales to these retail outlets, getting on the shelves, they are not [918] going to carry more than one or possibly two spark plugs in their shop. Therefore—and there was no vacuum in the marketplace.

"So that advertising alone didn't help you get on the shelves too well. You had to have some other reasons, and

we—one is the—if you are on a piece of original equipment that is expanding, such as Ford was, and GM has always been very good, there are some opportunities for you to maybe get on the shelves. But with Chrysler declining and the whole thing in some trouble, the thing didn't look very healthy to us.

"Therefore this is when we started putting on pressure to get into other companies, try to get into International Harvester, into American Motors deeper, into Ford—we tried to make a special effort to get into Ford Motor Company to get some of their business, and there were some other problems—one other factor that was taking place. There was also a shift from the original equipment parts, which was a problem. People stopped going down to their dealers as much for service. I mean the owner, the automobile owner.

"They tended to go to their service stations for minor tune-ups, to get the points [919] changed, spark plugs changed and so forth. And therefore, because so much of ours had been through original equipment, this business was declining for us as well, and this major shift gave—the AEA distribution didn't service the service stations, the gasoline stations, as well as some of these so-called gyp lines, like NAPA. They had a broad line of parts which they could put in, that covered all automobiles, and whereas the AEA, who operate only on original parts, had more difficulty doing this.

[920] "Q. Getting back to spark plugs for a minute, on what kind of basis were you at Chrysler—was it a five-year or ten-year contract, or was it something else? A. You mean on this—

"Q. Spark plugs. A. We had no definite contract. We used to get a purchase order once a year, but no long term contract.

"Q. Did you consider that Chrysler might want to integrate its own spark plug manufacture at any time? A. This we felt was a possibility, mainly because we felt that if Chrysler hadn't had the difficulties that they had had, or were having, internally, that their program had—the aspect that they would go on, and do more of this type of integration, and that they wanted—there was a feeling that they wanted to get into the after market themselves. But the whole thing was stopped to some degree by this particular trouble they were having, and yet we felt if they ever got out of their troubles, they would proceed again.

"Q. Did you ever consider whether Ford integration of manufacture by Ford would have any effect on you as a spark plug supplier? A. If they went into the spark plug business themselves?

[921] "Q. Did you ever consider what would happen if Ford Motor Company integrated the spark plugs? A. There was another thing that concerned us. When we approached Ford to get more business, we found a degree of interest from Ford, but mainly in 1958, the Champion Spark Plug Company went public—they had been a private company up to that time—and the figures that came out were very large—showing very large profits, and up to that time no one on the outside knew how profitable the spark plug business was, because all of our figures were buried, Champion being a private company, AC being part of General Motors, and our company having more than one product, our figures were buried as well, our spark plug profits.

"Therefore, when Ford—the thing we felt—they didn't say this exactly, but we felt when Ford saw those figures and saw how much profit there was in it, I think they were a little shocked themselves—that is my feeling; it is not what they said—but that this is something they had let get

by them over a period of years, and the very essence of that much profit going to a supplier would be enough to make Ford think in terms of integration into this business or doing something [922] about it.

"So that was—this created in our minds the fact that Champion might be pushed out some day into the open market, and they being the leaders in the field, that they would have to find an entree into Chrysler, or being the only other one of the big three and would do almost anything to do that, give them almost any kind of a deal to do this.

"Even if it came down to giving the spark plugs for nothing, they would do it, if it was legal to do it, and because they were hardpressed to maintain their position without the Chrysler—without one of the big three in there—as an original equipment.

"So this made it very difficult for us to see our way clear as to what we were going to do in the future."

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[935] "Q. Do you understand why it is that, as you testified, a status as OE supplier to one of the major vehicle manufacturers is necessary for an after market position? A. Well, I thought I covered that, but maybe I will cover it a different way, in terms of it as a matter of acceptance first.

"It doesn't have a linear relationship to how many spark plugs you sell in the after market exactly, but it does have an effect.

"Service stations do not want to take upon themselves, generally, the responsibility of putting what is considered to be an integral part of the engine something in that might not work, that might—if you break off the bottom of a spark plug in an engine, you can ruin an engine very easily. So therefore they are a little prone when in doubt, unless they

are experts themselves, to try to use the spark plug that the manufacturer originally put into the unit.

"On the other hand, that is not linear; some of them will —who are knowledgeable enough, may put in, if they are sure of the right plug, it [936] might be an AC spark plug into a Ford car or vice versa.

"This is the main reason why if you are not an original equipment manufacturer of spark plugs for the original equipment, you are looked upon as maybe giving the man a problem, who has to put the spark plug in. He is taking a risk by putting it in, and it is one that is very difficult to overcome.

"If you lose your status as an original equipment supplier, people remember that you did work with an original equipment supplier and you may be able to sustain a certain amount of business on that basis, but it is because—the feeling is that you have been completely tested by the company who is using your spark plugs, therefore they are not really taking much risk by stocking your spark plugs by supplying, even on other cars, although there is a tendency to try to keep it on the car that you supplied it for.

"Q. Well, if, say, Chrysler had switched to Champion because Ford had integrated its supply, so that Champion for Chrysler, AC, and Ford Motor Company as an original equipment supplier for itself— A. Right.

[937] "Q. —were competing in the after market with you, who did not have OE status, how long do you think you could have sustained a major position in the after market? A. It would start declining almost immediately, but we considered some of these things from time to time, and we figured that probably steady decline for five years, where you might arrive at a plateau which would be now, not much different; you'd have some advantage because people remember that you were an original equipment, but you

certainly wouldn't be in the same position you were originally.

"Now, this might be a little different between us and Champion. Champion were the leaders; we were not. We were number three. We were down the line, and a poor three in the sense of dollar volume, compared to the others. Therefore, our problem was a little more difficult. Champion might have a better opportunity to give it a go because they have the major distribution already, and—but at the same time they, because they don't know that this is true, they would be desperate to maintain this position as an original equipment supplier, and would do almost anything [938] to do that.

"One good piece of evidence of that is that as of this particular point in time, Champion has changed a lot of their policies. They won't make a private brand plug up to a certain point because they were maintaining the Champion, but they started to make a few private brand plugs as a hedge, I believe, and even in the case of Chrysler —Chrysler has—started a MoPar brand which Champion, I feel, feels forced to supply to maintain its position to continue to sell Champion spark plugs through Chrysler."

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[941] "Q. You indicated that you thought that batteries were trending in the direction of private brands, and you testified that your use of the Autolite brand on spark plugs had the problem that you have just mentioned, in the event that you might lose the original equipment status.

"Under these circumstances, what was your view as to the future of the Autolite brand at the time, 1959, 1960? A. It became—we became painfully aware of the fact that we were supporting a situation which had very limited future for us, and yet we were—rather forced to maintain

it so it had some value as time went on, perhaps waiting for a miracle and hoping that there would be some way that would become clear to us as to how to take advantage of the name that we had.

"We had a pretty good name in our Autolite brand, but it was deteriorating, and we did try to put, as I said, put more into it in advertising, even, to see if that would do anything, with very little success.

"Q. You stated your problems as you saw them.

"What actions did you take, as far as you can recall, to meet these problems? [942] A. Well, as I mentioned before, the first thing we tried to do is to get more spark plug business. We did this by making solicitations to practically all of the OEM customers, of course, except General Motors, who had their own, and we went to every one of them and tried to get more business on the OEM basis to offset anything that we might possibly lose at Chrysler.

"We did increase our advertising budget in our spark plug area, to see if we could get on more shelves, attract more business from the after market, and try to increase our position.

"One of the things that we knew was that, in relationship to the amount of original equipment plugs Champion sold to the amount of original equipment plugs that we sold, Champion was getting more business per original equipment plug than we were. So we felt if we could close that gap a little through advertising, and—it might be some aid to us; we were not able to do much in that direction. We did a little, but not much.

"The other thing I suppose you want me to develop all around the various troubles we had—"

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[948] "Q. Now, you mentioned as one of the things you did, in order to try to meet those problems, was to approach Ford Motor Company to have them buy more stuff from you; is that right? A. Yes.

"Q. Do you remember that? A. Yes.

"Q. Did those discussions lead to anything? A. Well, we had a lot of discussions. Most of the early discussions were done by our sales people, who were involved there, and they put on presentations, and they saw many different people, and the engineers, parts people, and did all kinds of sales—made all kinds of sales efforts to get some of this business. And in the process we had an opportunity to talk to many of the executives, and try to impress them with the fact that we wanted to get some of this business.

"We didn't meet with too much encouragement, some encouragement by some people, but it was going to be a long haul the way we could see it.

"Q. Did discussions ultimately develop one way or [949] another— A. Well—

"Q. —that looked toward purchase of all or part of the Electric Autolite assets? A. Well, as the discussions went on, we pretty much exposed our problem to Ford as to reasons why we felt we had to go—get more business, and that we also made the point that we would be a darn good supplier to them because we needed them so bad, and they—and ultimately, I don't know whether we—what happened, but it kind of bubbles up out of this, that—well, perhaps we should go into a joint venture on some basis.

"We were getting really kind of desperate in terms of acquiring some kind of further business, and so the—out of the discussion came the talk of possible acquisition, and which led eventually to a formal meeting concerning this, where we discussed it in depth, and we talked about, 'Well, what about the whole company at one time.' And these

discussions went on for a period of six months or so, off and on, with us not finding any real common ground to do this. It was a great deal of misunderstanding in terms of what it would take to do the job, and over a period of six months, I [950] think they—the Ford people began to learn our problems in depth and we began to realize what they wanted in depth, and so we finally arrived at a position which we could both compromise on and came up with this—the deal that was consummated.

"Q. And the deal that was consummated included a spark plug plant, did it not? A. That's right.

"Q. And which one was that? A. Fostoria.

"Q. And that left you with the Decatur, Alabama plant, or hadn't you gotten that yet? A. We had the Decatur, but we didn't put the spark plug facility in it.

"Q. You did that subsequently? A. Yes.

"Q. Did you have a plant outside the United States that manufactured spark plugs? A. Yes, in Canada.

"Q. Where is that? A. Sarnia, Ontario."

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[951] "Q. And what else was included in the deal, do you recall? A. Well, yes; we sold a battery plant, a spark plug plant, the Autolite brand name, and worked in a—we had a distribution system that went with Autolite—all Autolite parts. The after market—

"Q. By 'distribution system', do you mean the contact with AEA warehouses that you mentioned? A. Right.

"Q. And with anybody else, any jobbers or anybody? A. In this particular case, all of the distribution for spark plugs, Autolite spark plugs, and Autolite batteries, which would be a combination of jobbers and warehouse distributors, and mostly the [952] distributors for the Autolite brand parts.

"Q. You were allowed under the agreement, or were you, to sell to these same people. This was—you weren't giving an exclusive arrangement? A. No; we could sell to anyone —Autolite brand—who wished to continue to buy from us the Autolite brand.

"Q. This was what, spark plugs? A. This was anything.

"Q. Anything? A. Yes.

"Q. This wasn't forever, was it, the Autolite brand. You were selling the Autolite brand, were you not? A. We were—in other words—"

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"A. We could sell to anybody in the original equipment, who had been buying from us.

"Q. For example, taking the warehouse distributors whose contracts, or whatever it was, you turned over in connection with the acquisition, could you sell to them under the Prestolite brand, for example? A. Yes.

"Q. Could you sell any other brand to them that you [953] wanted to? A. Yes.

"Q. As far as your spark plug people were concerned, if you were to sell Prestolite spark plugs, was there any restriction on where you could sell those? A. No, no restriction.

"Q. Was there any restriction on where you could sell batteries under any name you wanted except Autolite? A. No restriction.

"Q. So really you were introducing certain distributors to Ford Motor Company but were free to sell them yourself? A. Yes.

"Q. After that? A. That is correct.

"Q. Indeed, I think you testified earlier that the AEA warehouses now carried Prestolite parts, do they not? A. Right.

"Q. Did you also sell any service parts inventory to Ford in connection with the acquisition? A. Yes, we sold them a base inventory so they could properly service the accounts for the Autolite brand, and then supplied further Autolite parts to [954] keep the inventory up to date.

"Q. With respect to those service parts that you sold, were they substantially contained in the 1960 Autolite catalogue,— A. Yes.

"Q. —which we earlier introduced here? A. There were some parts we left out of there because they had become old and obsolete, and we didn't feel it was necessary."

Mr. Shapiro: Your Honor, the reference there is to F-2a, the reference to the 1960 Autolite catalog.

"Q. I suppose there were some nuts and bolts or something that were included? A. That's right. And we would be in a position to supply those if they got an order for them, but it wasn't necessary for them to carry it.

"Q. Was there ever any talk in the course of your negotiations about selling assets and not including the Autolite trademark? A. Yes, there was—this held up—held up the discussions, the negotiations, a great amount because Ford thought, well, they said we have a brand name, we'd like to just maybe buy a spark plug plant and a battery plant; and we said, 'Well, from our [955] standpoint, though, this would make no sense. First of all the spark plug plant you would like to buy is a big one, and it would put us out of business for a while until we could build another one or get this other one completed down in Decatur, Alabama. Therefore, if you are going to buy spark plug plants, you have to buy the Autolite name, too, because we wouldn't be able to be supplied properly.'

And so they couldn't understand this. They said, 'We don't want the Autolite name.' This was the early discussion.

"So it took a long time to recognize that the Autolite name had some value to it, and that as far as we were concerned, the price was going to be the same if it—whether they bought the plant alone, or the Autolite—with or without the Autolite name, so that we couldn't sell particularly the spark plug plant without selling the Autolite name with it.

"Q. Did you consider Chrysler as a possible alternative purchaser of the assets? A. Yes, but it—at the critical time, when this was taking place with Ford, as I understand it, prior to my time with the company, discussions had gone [956] on with Chrysler, but particularly when they were discussing whether—when they were going into their own electrical parts business, naturally the thing was, 'Instead of doing that why don't you buy our facilities?' And they looked it over, and they said because of the union problem in Toledo, that—an old plant, that they felt that they would be better starting from scratch themselves.

"And—

"Q. Was there any other reason that you know about, that might have prevented Chrysler from being a purchaser? A. No, I don't think of anything, unless they didn't have the money; I guess they had the money—they built their own.

"Q. You had mentioned earlier something about the relationship of the parties on a personal basis, and I thought you might— A. Oh, well, it—I think Autolite was a—Electric Autolite was in a decline at this particular time with the then Chrysler management, and I felt that they probably didn't want anything more to do with Electric Autolite as far as getting that deeply involved with them. They wanted to start out brand new and new plants and new processes, and so forth."

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[958] "Q. Did you consider that, having transferred the Autolite name, you would be left with any appropriate trademark to use in your business, or did you think you had one? A. Well, no, we had two things we wanted to do. First of all, we felt that the private brand business had never been exploited properly by our own company, that we could have used it as a fill-in type of business, and yet some of our competitors were making it their main business.

"And we felt that inasmuch as we were not able to support a major brand name, we could support a moderate brand name, such as Prestolite, and—because there are some customers that want a brand name, and yet we wouldn't be faced with the task of supporting a major brand name.

"Now, we could have perhaps let Autolite brand name trickle backwards down to that position, [959] but we felt to do that would have been taking a loss in the capacity in plants and so forth, and that if the route we chose was better for Electric Autolite and if we had the Prestolite brand name, it was a question of maintaining it and maybe giving it a little more emphasis. But we certainly weren't going to pour the money into it that we poured into Autolite and then concentrate a lot of our efforts into the privtae brand business, going after more private brands, and which we were successful in doing, getting more of this type of business."

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"Q. Did you actively solicit Chrysler as an original equipment account? A. Yes. Well, Mopar wouldn't have been sold on the same basis as an original equipment brand. If you sell a private brand spark plug even to an original equipment account, you sell it on a higher price than you would your own brand name because you are [960] not going to get the after market with their name.

"Q. If they were to use the Prestolite brand name, would you sell to them at the regular original equipment price? A. If they would give us an order in volume, yes; not a small one, but one that would make it worth our while, we would have done it. When I was there we would have.

"Q. When you were there—and I am talking now about 1964. A. Right.

"Q. You were there throughout that entire period, I think? A. But I was not too active in the last part.

"Q. During the period that you were active in 1964, would you have taken on Chrysler as an original equipment account if it had been available to you? A. Yes. As an original equipment account. In a volume at least for some proportions to make it worthwhile—obviously not 10 per cent of their business.

"Q. Were you in a position to do this? Did you have the capacity to do it? A. We had the potential capacity. We had—we could have started off on some percentage and we had [961] methods of pushing our capacity up by ordering numerous more machinery and so forth, but we certainly had the technical capacity.

"We had the capacity to start them on that basis; we would have eventually had to expand to take care of the whole requirement, plus the after market.

"Q. Did you have available any equipment with which you could have made ceramics? A. Yes, we had in storage whole ceramic plants which would have been able to be put into operation. We found it more economical to purchase our ceramics, but we felt if our volume ever got to a certain point and we wanted to go into our own ceramics, we had this plant in storage which could be put into operation in a fairly short time.

"Q. Do you know what the source of that ceramic plant was? A. This was B & G spark plugs; they liquidated part

of their—I guess all their facilities, I believe, and we picked up the ceramic plant in the process.

"Q. Do you know the year? A. 1963 or 1964; 1963, I think.

"Q. Did you talk to anybody yourself at Chrysler about the possibility of becoming their original equipment [962] supplier, any time after 1961? A. Yes.

"Q. With whom did you talk? A. Mr. Hartig, who is head of their purchasing, Mr. Daley.

"Q. Did anybody else in the Eltra organization talk to anybody, as far as you know? A. Yes, I am sure people—other people talked to Mr. Hartig, and maybe some of his people in the purchasing department, and the engineers have been talked to.

"Q. You made, I suppose, a bid for that business? A. Right.

"Q. And were you prepared to accept the business if it had come to you. Is that right? A. That's right.

"Q. As far as you know, would Eltra be willing to supply Mopar spark plugs to Chrysler if Chrysler wanted them at any time? A. Yes."

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[963] "Q. I think I asked you this question before, what the capacity of the Fostoria plant is. I think you said you didn't know. A. I didn't know, but I would assume—I mean, we were doing some $22 million worth of business at that time. I imagine we could have put out thirty to thirty-five million dollars worth of business.

"Q. Does half a million plugs a day sound right as a capacity figure? A. I think that's about right, yes.

"Q. In your opinion, could the Fostoria plant, with its capacity, been run economically without a major vehicle OE account? A. No.

"Q. Getting into the technical area a little bit, Mr. Davies, what is the heat range problem that people talk about in the spark plugs business? A. Well, engines—engines are built differently, and have different kinds of capacities, and also how the engines are used. We have what we call a cold [964] plug and a hot plug, and the hot plug is one—it's got to be inversely proportional—is one where the engine doesn't ever get very hot, so you want a plug that will give a good spark and will do a good job under cold situations.

"So that in the framework of hot plug and cold plug, it depends on what situation that you are—that you want. A hot plug—in terms of a hot spark, however, when it gets into the area—thermal conductivity is what you are talking about.

"We actually use cold plugs for racing engines, for example, because of the fact that the temperature inside the combustion chamber gets so hot that on a plug that would get incandescent on the plug, and you get pre-firing on the plug and you want what we call a cold plug to keep it from firing when it gets hot.

"It has high thermal conductivity; it takes the heat away quickly, and more or less buries the sparking element in a shell so that it is not that way out in the gas stream.

"So that hot and cold plugs are—different engines require hot plugs or cold plugs. A little old lady who drives to the store once a day and never gets her engine hot has a problem. She needs [965] a hot plug, so that she can—doesn't foul up and corrode—corrode out, and get a lot of condensation on it when it is shut down, so you need a different kind of plug for her than you have with the young fellow who may want to zip around the corner quite fast.

"Q. Now, to get a particular degree of thermal conductivity, what is the characteristic of the ceramic that is

important? A. There are several ways of doing it. Chemically you change the chemical content; and one of the ways of doing it is to put—before the ceramic is fired, is to put material in there that when it is put together before it is fired is organic in nature, or will vaporize, when it is fired it will leave hollows in the hollow spots inside—make it porous so that you get a better thermal insulation.

"Q. So, in other words, the thermal conductivity is a function of the relative porosity of the ceramic; is that right? A. Porosity and also some chemical elements, some chemical elements will have more conductivity or less depending on what they are.

"There are two ways of doing it, and both of [966] them are usually combined as you range from hot plug to a cold plug.

"Q. If the plug is more porous, does that mean that it will be a hotter plug or would it be a colder plug? A. It would be a—if it is more porous, it would be a hotter plug.

"Q. Yes, it would be a less good conductor? A. That's right.

"Q. And if the porosity were less, then it would be a colder plug because it would be a better thermal conductor; is that right? A. That's right.

"Q. And to get the degree of porosity that you are talking about, you would put certain organic elements in the mix? A. That's right.

"Q. And get the degree of porosity that you wanted? A. Right.

"Q. You mentioned earlier that it took quite a long time for Electric Autolite to qualify its plug for Chrysler— A. Yes.

"Q. —when they first went in? A. Yes.

[967] "Q. Is there a general close relationship between the engineers who engineer a plug and the engineers who

engineer an engine in order to qualify a spark plug? A. Yes. This is usually a very close liaison between the two groups, and it takes quite a bit of trial and error also to get the right heat range for an engine to operate under all circumstances.

"In fact, some of them do not have to change spark plugs to different conditions sometimes, because the heat range is not adequate for the whole range of operation it might be subjected to.

"Q. So you say the trial and error is the way in which it is done? A. Yes. It is an art rather than a science, really.

"Q. Now, does that mean that you, as a spark plug manufacturer, could not pick up a—say, an AC spark plug, and duplicate it exactly so that your plug would be as well qualified as the AC plug for General Motors vehicles? A. You mean to their engineers' satisfaction?

"Q. Yes. A. Without the liaison and so forth, we might come up with one that is as good and would pass, but would not have the same chemical contents or— [968] but we would end up with the same result in the engine. I mean—

"Q. Function? A. Same function. But we couldn't—in fact, if you even gave me the chemical formula I might not be able to do it, because you have to know the heating cycle and a lot of things about it, what the grain size of the ceramic is and a lot of things about it.

"So come up with—so I guess your question is, if we saw a General Motors plug and we wanted to come up with one equal to it, could we do it in a vacuum, I mean, without any help from General Motors. But we might do it with what we think is the plug that we think is good enough; whether their engineers might think so or not, we don't know, but we'd feel that we could market it on the after market.

"Q. You could market it on the after market, but do you think that it would be as good a plug for a General Motors

car, or would the engineers of General Motors think it as good as the AC plug? A. You are boxing me in here—

"Q. I realize the problem. But what I mean is: Is all this work among engineers for naught, or is [969] there some value to it? A. There is some value to it, definitely.

"Q. Right. A. But there are—and there are areas of conflict which the customer always wins, but sometimes the supplier doesn't think he is particularly right. But nevertheless you need that—you need that engineer's—the engineering—the customer's engineering approval before you can be considered an original equipment supplier.

"Q. And, as you have testified, the question of whether you are an original equipment supplier or not is related to the question of whether your spark plug is acceptable in the after market; is that correct? A. That is correct."

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CROSS EXAMINATION

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[972] "Q. Now, getting back, you indicated that at one time, you had gone to Ford—I think it is Ford Exhibit 3—and presented a plan to them to sell them some spark plugs; is that correct? A. I didn't, but our people did, yes.

"Q. I am sorry; did you enter into those negotiations? A. No.

"Q. Were you present during those negotiations? A. No, not that particular one that you are talking about. This was a sales presentation to the Ford Motor Company.

"Q. Then you had testified previously that, during the presentation, or sometime thereafter, you discussed with them the sale of Autolite spark plugs to Ford Motor Company, is that correct? A. This was not during that presentation.

"We had several—I mean, our sales people were on their doorstep almost daily, talking to anybody who would listen to us, both engineers, purchasing people, even their sales people, high [973] up in management as they could get, to try to get an order for spark plugs.

"And out of this—it is kind of hazy as to exactly what happened, but out of this came the word back that, well, some of the people at Ford wonder why we don't get together and work something out on a joint venture.

"And then we were eager to talk anything in terms at this particular point, so that we organized a formal meeting at some point.

"I can't remember exactly how the thing worked out, but I got involved in a meeting with several of the Ford people and we had a discussion with them.

"Q. And when you went to Ford originally, you were trying to increase your spark plug sales, is that correct? A. Yes.

"Q. Did you go to General Motors? A. Oh, no, because they make their own spark plugs. General Motors makes their own.

"We went to everybody else, though—American Motors, Studebaker, International-Harvester—everybody, to increase our percentage. It was our dependence on Chrysler that was worrying us."

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[974] "Q. To your knowledge, did anybody beat the drum for Chrysler's business? A. Oh, yes,—well, there were always people knocking on the door there. We know that a lot of small manufacturers particularly—I don't know whether Champion—we know that they used to knock on Chrysler's door.

"But, whether they felt that—whether they were doing it this time, I just don't know.

"I know that we had heard a rumor that they had received a request for a bid a couple of times from Chrysler, but whether it was just a testing to see what the price was, or what it was, I don't know.

"Q. Your original equipment price, of course, was always below your cost price, is that correct? A. That is right.

[975] "Q. That was to Chrysler? A. To Chrysler, yes, or to anybody. It was offered to any of the original equipment manufacturers on the same basis.

"Q. And just to make it clear, why would you sell below your cost price on original equipment? A. Well, as I said, we followed a pattern that had been set by Champion many years ago, and the basic objective, I suppose their basic objective was one of two things:

"One was that by giving this low price to the manufacturer, the manufacturer himself wouldn't be—wouldn't particularly want to get into the business; he was getting it below cost.

[976] "And at the same time it was to attain the position of being an original equipment, so that when it got out into the field, when it came into a service station some place, people would see a Champion spark plug or Autolite spark plug in that engine, and have a tendency to replace that with a like plug.

"And because you get somewheres between seven and ten replacements in the lifetime of a car, for every one that you put in on original equipment, the obvious point is if you could sell one real cheap, and sell ten on the outside at full price, and consolidate yourself in the business this way, it was a desirable thing to do."

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"Q. Now, during the course of the conversations, as I understand it, you entered into the negotiations with Ford. Now, was this for the sale of the spark plugs, or was it for the sale of your business? A. Well, you mean at what point we were starting out to sell spark plugs originally?

"Q. That is right. A. By osmosis, it developed into talking joint merger [977] or joint venture as some method of approach which, as each one of these things came up as possibilities, people found reasons, 'Well, that won't work so good because'—then we would go on to another thing.

"And finally, at one point, we even discussed that 'Maybe what we ought to do is buy the Electric Autolite Company,' and then we discussed that.

"And then, it didn't seem like a logical move. We didn't want to sell the whole company, to begin with.

"Originally, we didn't want to sell the spark plug business. Then the more we got to thinking about the problem, what we were going to do if we didn't do something like this—and then, it became more that we felt, after several meetings amongst our own people, that the logical way out of this thing—we were going to be a little bit wrong no matter, what we did—was to go on the route to try to sell Ford Motor Company the Autolite name, a spark plug plant or battery plant, but to go into the business ourselves, and go in on the basis of the private brand approach and get out from under this tremendous burden of carrying this [978] large sales organization, this large expenditure for advertising which we were spending several million dollars a year for, and put that into the hands of somebody who had a track for this racehorse to run on. We had lost our track.

"Q. Who from Ford suggested that you sell them the Autolite business? A. It's difficult to remember which person, because, we were sitting around like we are here—

"Q. I am not trying to pin down any one person. Were there a couple of people from Ford who told you it might be a good idea for them to purchase your business? A. Well, remember, this started down in the—with the sales groups first. I mean, this was where they kicked around with people who, you might say, wouldn't be in a position to make any policy for either company really, but they—you know, they kicked around and kind of promoted the idea of joint venture, and 'Maybe we ought to buy you out,' or something like that.

"And then, by the time it bubbled to the top of their organization and the top of our organization, and we did finally get a formal meeting, the meeting was to discuss, in principle, not selling [979] spark plugs but the possible joint venture or sell-out of our spark plug business with this group.

"So, you might say, who started—it was really started down the line, and by the time it got to us, we were ready to talk not about selling spark plugs any more, because they had—we had pretty well been discouraged—'Well, if we shift over, we will have a lot of problems and have two suppliers'—so we decided that maybe this is the only route we were going to get anyplace on."

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[981] "Q. All right.

"Now, let me ask you: But you sold your only spark plug plant, right? A. Yes, but with the understanding, though, that we were going to build another one.

"Q. When did this understanding come out? A. And they would take care of our needs during the time, until we built a new one.

"Well, this happened prior to the agreement.

"Q. Well, let me ask you this: You built your Decatur, Alabama plant when, 1960? A. Right, yes.

"Q. Originally, was that plant built for making spark plugs? A. No.

"Q. When did you decide to make spark plugs there? A. In—while we were negotiating, we said, 'Look, if we sell you this plant, we've got certain customers we have got to take care of and we want to maintain after this thing is over. We can probably get by for a while with you continuing to supply. But we have to get, as quickly as possible, a plant in shape to do it.'

[982] "And we had space in the Decatur plant to do it so we went in there and put the spark plug section in there."

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"Q. If you are going to manufacture ceramics for spark plugs, is it necessary to have a large volume of business to operate a ceramics plant? A. Well, it doesn't—well, in our particular case, it would have—I don't know.

"There are two kinds of plants, ceramics plants. And the type we had at Fostoria—this was another one of our problems at Fostoria, and one of the reasons that decline would be a problem for us.

"We had a plant there that needed a large—a certain—a larger minimum volume than the kind of plant you can build which is on more of a module basis, where you can set up a module of a ceramics plant and say, 'All right, we will produce two million.'

"This will be big enough to produce two million a year. Then, if you want more, you add [983] another module to produce two million.

"At Fostoria, you had to run the whole plant, or run none of it, practically, where, as you didn't have modules, you could shut down or you had to run the whole thing.

"Now, it was a little, we felt at the time—at least, Bob Twells felt that we had a little more efficiency with this type of thing. But we didn't have the flexibility.

"So that, if we ever got cut in half by anybody, we would be in trouble cost-wise, with this particular operation."

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"Q. One thing that has puzzled me a little bit, Mr. Davies, is that, in the agreement that you entered with Ford, you sold all of your spark plug facilities other than your Canadian facility, and yet, as I understand the agreement—and I am not sure I understand it clearly, you were still required to furnish plugs for Ford Motor Company.

"Is that correct?

"A. Correct.

"Q. Could you enlighten me on that. How can you furnish plugs to Ford Motor Company when you have no [984] facilities for manufacturing plugs? A. Well, we—the agreement was set that when we did get our facilities, we would start to manufacture plugs.

"Q. And you did build your facilities, and you have been furnishing plugs to Ford? A. Yes.

"We don't supply them any more, I don't believe.

"Q. And when did you quit supplying, do you know? A. I think at the end of a—we had a two-year contract with them, and I think at the end of that contract is when we finished—I think that contract was set up—it wasn't necessarily two years. It was two years and/or so many plugs—I have forgotten the dollar volume or the amount of plugs.

"But at the end of that year, or at the end of that contract was when we stopped supplying them plugs. And I don't believe we have supplied any since.

"Q. Why did you enter into such an agreement as to furnish plugs, when you weren't even in the business,

apparently, when you sold the company? A. Well, the point of it was that when we were talking price in this area, this got into the price [985] situation. So we asked for one figure, and they talked another one, and we kept batting it back and forth and exchanging things a little bit here and there, to sweeten it up for either side and try to get it without giving out cash sometimes, and so that we—

"In other words, when you are starting a new plant up, it would be awfully nice to have an order that would work into this situation and nevertheless, so that—

"I think price got somewhere within the range that we knew that, to take some of our starting-up costs, if we could get an order, maybe we could—

"Now, we didn't—I'm not sure we told Ford this, but in our mind, we said, 'Well, if we get this and start up on this plant, this would be a savings to us. So then, maybe what we ought to do is try and get an order for spark plugs from Ford so we can get this plant started properly,' which we were finally able to do.

"Q. So that, in effect, the Ford purchase order really put you into the spark plug business? A. Well, we had other customers, but it sure gave us a lift."

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[986] "Q. Now, I realize this is all hearsay because you were not with the Electric Autolite Company when Chrysler started buying plugs from Autolite. A. Right.

"Q. But, since you testified to this before, do you know why Chrysler wanted Autolite to go into the manufacture of spark plugs for Chrysler? A. I think that primarily was that Chrysler—it is my understanding, in the early days of this relationship between Autolite and Chrysler, that they used Autolite almost as if it were a division of Chrys-

ler. And, although I don't believe there was any corporate relationship, or stockholdings back and forth, or anything like that, they found it useful, due to the closeness of the two organizations, to use Autolite to get into areas where they felt there wasn't enough competition in this—in a specific area.

"And bumpers were one of these, that I happen to know that they—and I believe this follows [987] through with the spark plug at that particular time.

"I think Champion and AC dominated the overall spark plug thing. There were a few other small suppliers, but none which seemed to be qualified to Chrysler's viewpoint.

"And I think that they wanted to, by putting us into the business, have another source of supply, and somebody who they were a little closer to, as well."

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"Q. Now, also, I think you testified that the Fostoria plant could not be—could not be run economically, without a major OE account. You testified to that, isn't that correct? A. The Fostoria plant, yes.

"Q. And this, of course, would be when you were President of Electric Autolite? A. Correct.

"Q. Now, by that do you mean that you had to have a [988] volume amount to economically operate the Fostoria plant? A. That is right; and I felt we couldn't get that volume amount unless we had an OE customer, a major OE customer."

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"Q. Well, let me put it to you this way: If you wanted to open a ceramics operation right now, or if Eltra did, do you think that there would be anybody at AC or Champion or Ford that they could hire to handle it without taking the top man away from either of those companies?

A. Yes, there would be people that you could hire. I mean, there isn't just one man that knows the secret. There are several of them. I think we had six or eight people that were well known in the ceramic art particularly, which is the most difficult. There are fewer ceramic people around than metal working people.

"Q. Among the three companies that are the largest—AC, Champion and Ford, right now—would you say [989] that there are a pool of people that would be available to be hired to run a ceramics plant? A. Oh, yes.

"Q. When Mr. Twells left, did he leave behind any people in your organization that would know how to do it? A. One in particular, who is in Canada, which we had thought we would bring down to the States if we ever got into this picture; and then two or three others, who would make good assistants to this particular chap."

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[996] "Q. In connection with your distribution of spark plugs, other than by sales to Chrysler of spark plugs for replacement— A. Yes?

"Q. What distribution did you have? A. Well, we had a combination of AEA distributors—warehouse distributors—and other big time jobbers, big jobbers that distributed our spark plugs. Plus we sold—I can't remember what date some of these things occurred—but we sold spark plugs also to Firestone and Goodyear under their brand name sometimes, and sometimes under Autolite.

"And I believe both companies sold—particularly Goodyear—sold both Autolite and Goodyear spark plugs for a while, and then we sold some to Atlas, under the Atlas—I mean Standard Oil, under the Atlas brand.

[997] "But primarily our biggest distribution was the warehouse distributors of the AEA, plus these big jobbers,

who in turn sold to the smaller jobbers and other retail outlets.

"Q. Now, the Autolite spark plugs that you sold in the after market to the AEA warehouses and these big jobbers, were they the same part numbers and the same spark plugs, in effect, that were sold to Chrysler for original equipment, and to other original equipment companies? A. That one, plus others that we made. This was not in the same concept as the AEA original parts; we did make a full line of spark plugs that would fit any car. But the Chrysler spark plug numbers would be in this group.

"Q. Do you have any idea what proportion of spark plugs that were sold in the after market were identical to spark plugs that were sold for original equipment use? A. I am sure we have those figures, but I couldn't give them to you.

"Q. You don't have any— A. I can't get any true recollection of what that would amount to.

"Q. Would you say it was the great majority of the [998] spark plugs sold? A. I know it was a majority. But I am not sure it was a great majority. But it was a majority.

"Q. Did you sell to any other group of warehouses besides AEA, such as the AWDD or others, or were warehouse distributor sales through the AEA only? A. Towards the end that—we were almost signing up everybody who would distribute, we may have had some AWDD.

"Q. By the 'end', what do you mean? A. We were trying to expand ourselves in this market and anybody that would take our line, in 1959 through 1961, we were pushing to get them to take the line.

"We were going into multiple distribution in the same territories, even."

* * * * *

[1014] "Q. And when you went to Ford originally, you were [1015] trying to increase your spark plug sales, is that correct? A. Yes.

"Q. Did you go to General Motors? A. Oh, no, because they make their own spark plugs. General Motors makes their own.

"We went to everybody else, though—American Motors, Studebaker, International-Harvester—everybody, to increase our percentage. It was our dependence on Chrysler that was worrying us.

"Q. So you went to everyone who didn't make their own spark plugs? A. That is right.

"Q. If you were in business today, would you go to Ford Motor Company? A. If I were in business—

"Q. You are in business today of making spark plugs, is that correct? A. Yes.

"Q. Have you gone to Ford Motor Company to sell them spark plugs? A. We—we have had some—we don't feel today, now, that they have expanded their capacity and so forth so that we could get an order there. So we don't go there now.

[1016] "Q. You said you went to Chrysler? A. Chrysler doesn't manufacture their own spark plugs.

"Q. So you wouldn't go to a manufacturer, is that correct? A. No, no.

"Q. Now, if we can go back to the agreement, or to the entry into the agreement: First, as I understand it, some of your sales people went to Ford and attempted to sell them on buying your spark plugs in addition to buying Champions or as replacements for Champions? A. In addition to buying Champions.

"We didn't expect to replace Champion at Ford. We merely wanted a percentage.

"We felt that if we could get part of their business, this would be all we could expect, probably, out of it.

"Q. Now, on what basis did you think you could get part of Ford's business? A. Well, Ford went into a program back in—after—sometime in the forties, of having two suppliers for every item, not having just one supplier, mainly because of the problems of suppliers' strikes and suppliers' problems.

"There was kind of a trend to going to two [1017] suppliers for everything. This was one of the exceptions. They hadn't done this.

"So, we felt we could go back and beat the drum a little bit and see if we couldn't become a second souree for this particular item.

"Q. To your knowledge, did anybody beat the drum"—

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[1029] "Q. Now, as I understand it, during the interim period, say between 1961 and when you left the company, you were buying some ceramics from Ford, is that correct? A. Right.

"Q. And this was from your Fostoria plant, or the one that had been your Fostoria plant; is that correct? A. Right.

"Q. Now, was General Motors manufacturing their own ceramics at this time? A. Yes.

"Q. Did you go to General Motors to buy any ceramics? [1030] A. It seems to me that—you know, the purchasing department cast around a lot, and we were looking around for other sources of ceramics. And I believe we talked to Champion about ceramics, and I think we talked to some of the General Motors people—our purchasing people did.

"I remember some reports coming back as to the possibilities. And as I understand it, they weren't too interested in supplying us with ceramics, either company, as I recall.

[1031] "Q. Do you remember what Champion told you? A. Well, they didn't say anything too bad, but—

"Q. They just told you they wouldn't furnish them? A. They wouldn't furnish them, that is right.

"Q. How about General Motors? Do you know what they said? A. They said, 'We are not in the business of selling ceramics separately.' They just weren't interested, as I recall.

"Q. Were you satisfied with the ceramics you were getting from Frenchtown? A. No, we were not. We had problems with it, and they didn't seem to be able to hold the heat ranges that we wanted. And so we discontinued their use after a while.

"Q. After a while? Do you know when you discontinued? A. We started with them probably in—1962, about a year, I would say, somewhere in there—1962 to 1963, somewhere like that.

"Q. And where did you get your ceramics from? A. Ford.

"Q. When you left the company, the only place you were purchasing your ceramics from was from Ford, is that correct? A. I believe that is correct.

[1032] "Q. You weren't purchasing them from this other source you can't remember the name of? A. No.

"Q. Do you know why you weren't purchasing them from the other source? A. As I recall, we didn't feel that they were qualified. They had never produced for a major company and—so I just didn't think they were qualified.

"We knew that the Ford ceramics were good; the price was one we could live with.

"And the only other thing that we had some reaction to was the fact that some of our customers, if they were competitors of Ford, wouldn't particularly want, maybe, to have ceramics coming from Ford.

"But we felt that, eventually, some day, we might have to go back into the ceramics business.

"It was strictly a matter of economics. We had all the technical capability to go back into it at any time we wanted to."

And I would stop there, your Honor, and go over to page 212, line 11:

"Q. Now, as I understand it, when Ford bought your Fostoria plant, as of that moment, you were not in [1033] the spark plug business; is that correct? A. As of that moment—not in the United States.

"Q. In the United States. A. In Canada, we were.

"Q. Now, was this 25 million ceramics that were to be furnished to you—was that for the United States, or was that for the United States and Canada? A. United States and Canada.

"Or, I guess, any place, really. I don't think it was limited.

"Q. Have you, during the period of time since the agreement and when you left, have you bought 25 million ceramics before? A. No, I have not.

"Q. Do you know about how many ceramics you bought from Ford annually?

"I am not trying to pin you down to a figure. Half that number?

"A. We never came close to that number. I know that.

"I think—I think it's below 10 million.

"Q. Somewhere around 10 million? A. Yes."

Now I would refer you, your Honor, to page 230, line 17. 230, line 17:

[1034] "Q. Could you tell me, do you recall or do you know, your spark plug sales generally, did that stay static or did that decrease between 1957 and 1961? A. I think we made some—it was fairly static, but I do think that we made a small increase overall.

"Q. So that your spark plug business at least stayed static, or increased a per cent or two? A. That is right.

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[1036] "Q. So that the decline in profits between 1957 on OE—excuse me; the decline of sales between 1957 and 1961, if there was a decline, was represented by business other than the Fostoria and Owosso plants; is that correct? A. Yes.

"Q. In other words— A. Yes.

"Q. In other words, your sales from your other plants declined, but the sales from Owosso and from Fostoria remained relatively— A. I would say relatively the same, yes.

"Q. They may have decreased a percentage, or increased, but they were relatively the same? [1037] A. That is right.

"Q. So that, as I understand it, at least some of your other plants were in a decline during the period 1957 to 1961? A. Right.

"Q. And your Fostoria plant and your Owosso plant were, at least, maintaining their own position in the market? A. That is true.

"Q. Is that correct? A. That is right.

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[1039] "Q. Let us just take 1963 as a year.

"Do you have an estimate of what percentage of your business for spark plugs was represented by this Ford contract? Would it be half?

"A. It was a substantial percentage, but I can't give you—

"Q. 75 per cent? A. I think—

"Aren't those figures available?

"Q. I am really not trying to pin you down to it. Would it be over half, or do you know? A. I am sure it was at least half, and—

"Q. Probably more? A. Possibly more. I'm not positive. I think you had better let the record show that.

"Q. I am not trying to pin you down to a figure, but your recollection is it was at least more than half? A. I think so.

"What date did we say?

"Q. This was in 1963. A. 1963?

"Q. Yes. A. I think you are right. Probably—I think we were still supplying—yes."

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[1041] "A. Essentially, we are not supplying anything to Chrysler today on spark plugs.

"Q. Did they inform you that they were not going to buy any more spark plugs from you? A. Yes, they informed us that they were not going to buy any spark plugs.

"Q. Did they tell you why? A. Yes. They said it was a policy this year, a policy decision of theirs, they didn't want—they didn't particularly want any spark plugs, or any, what they call merchandised items, of a competitor on their equipment, which was the Autolite brand.

"Now, they don't mind a Ford part that is buried in the automobile somewheres, but a [1042] merchandise item such as a battery or a spark plug or shock absorber, one of the things that is widely advertised in the after-market, they didn't want those items on their cars.

"And at that particular time, we discussed Prestolite with them also, and they said, 'Maybe we will give you an opportunity, at some point in time, to do this; but in the meantime, we want to change over as fast as possible to another brand that isn't a competitor's brand.' "

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[1045] "Q. Would it be fair to say that if you had the volume without an OE account, you could operate Fostoria satisfactorily? A. Yes, particularly after-market.

"Q. In other words, the reason that you said that you needed a major OE account—you were referring to volume, is that correct? A. Volume that would be attracted by the OE account in the after-market.

"Q. So really, what you are saying is that Fostoria needed a substantial volume of business to be operated satisfactorily; is that correct? A. Right.

"Q. And the fact that whether you had an OE account or didn't have an OE account made no difference? A. No, it's volume that you need.

"Q. In other words, if you had the same volume without an OE account, you could operate it satisfactorily? A. Right.

"Q. Now, say in 1960, approximately how many AEA distributors did you have? [1046] A. It seems to me, and this is a guess, but a somewhat educated guess, that we were in the area between fifty and sixty warehouse distributors.

"Now, there were, when you get into the PDs and SDs, which were also AEA, there are a couple of thousand of each of those.

"Q. What is"—

The Court: What do you mean by PD and SD?

Mr. McManus: The next question is:

"Q. What is PD and SD? A. Parts distributor and—they are a form of jobber—and service distributor.

"Q. But you had approximately fifty or sixty warehouse distributors? A. That is right. They are the main line of contact.

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[1053] "Q. Now, why did you agree to buy ceramics from Ford when you were not in the business? A. It was almost the opposite.

"Well, we didn't agree to buy them when we weren't in the business but when we got back into the business. It wasn't—in fact, we wanted to assure ourselves of source.

[1054] "We said, 'Look, we would be able to get back into the business. The hardest part of getting back into the business would be to get the ceramics part of it going again.

" 'But it would be a simple process of getting back into the business if we had the ceramics, a much less technical job, more of a production-type job.

" 'So that, fundamentally, if we are to get back in the business quickly, particularly we want your assurances of the 25 million.'

"That was our figure, not their figure. We didn't know where this thing might go.

"We thought—we really felt we might hang on to—we felt we might—we knew we were going to have problems with Chrysler. But, you see, at this particular point, Champion would be without an original equipment account of the big three.

"I mean, they would be out of the big three. So we knew they would put tremendous pressure on Ford—on Chrysler, to get their account.

"But we felt that we might 'luck' through and keep a portion of it, or maybe keep all of the Chrysler account.

"You must remember, Chrysler was in kind [1055] of a changing situation at that particular time, and there were some difficulties, so that, talking to various people, you could get a different reaction, depending on who was in charge at the time we discussed this thing.

"And, as it turned out, we didn't—we didn't score, and we lost the account."

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Testimony of Bernard A. Chapman, Executive Vice President of American Motors 1960-1966

DIRECT EXAMINATION

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[1057] Q. During the course of your employment with American Motors, were you familiar with the sourcing patterns of that company in connection with spark plugs and batteries, among other things? A. I was.

Q. Now, before American Motors became American Motors, had there been a merger? A. Yes, there was a merger between the Nash-Kelvinator Corporation and the Hudson Motor Car Company.

Q. Do you recall what year that took place? A. 1954.

The Court: '54?

A. 1954.

Q. Now, did the two companies, for a time, retain two sets of dealers for the distribution of Nash vehicles and Hudson vehicles? A. Yes, they did.

Q. Did they eventually merge those two systems? A. Yes.

[1058] Q. Do you recall the date of that? A. As I recall, it was the 1957 model that, wherein the names Nash and Hudson both were dropped and we concentrated on the name Rambler.

Q. Now, prior to the merger between Nash-Kelvinator and Hudson, do you know what the spark plug source was for Hudson? A. The Champion people.

Q. What was the spark plug source for Nash? A. The Electric Autolite.

Q. Well, after the merger, did American Motors for a time continue dual sourcing from Champion and Autolite, respectively? A. Yes, they did.

Q. Was there a time when they stopped dual sourcing and shifted to just one source? A. We stopped dual sourcing and shifted to one, starting with the 1962 models.

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[1063] Q. I think you said that for the 1962 model year you shifted 100% to a single source; is that correct? A. That is correct.

The Court: What was your question, please,—shifted to what?

Mr. Shapiro: To 100% from a single source, your Honor.

The Court: All right.

Q. American Motors, up to that point, Mr. Chapman, had been dual sourcing, as they say; is that correct? A. That is correct.

Q. From the 1962 model forward, American Motors has single sourced, is that correct? A. That is correct.

Q. What is the single source that American Motors has been using since the 1962 model year? A. Champion.

Q. Do you know when the formal management decision was made to source 100% to Champion? A. That decision was made on June 19, 1961.

[1064] Now, approximately how long prior to June 19th, 1961, had American Motors been giving serious consideration to this change? A. You use the word "serious". I think we were giving consideration to the change for possibly a full year in advance of that date. I don't think it got down to any serious review until perhaps the early part of 1961.

Q. Well, was it shortly prior to June, or when was it that you say serious consideration was given? A. I would say in the January, February, March period of 1961.

Q. And I assume on up into April and May? A. That's right.

Q. As well? A. That is right.

Q. Now, in—

The Court: (Interposing) Why did you go to a single source?

A. The reason, your Honor, was that we were experiencing, in our after-market sales, in our judgment, a decidedly better performance with the Champion plug than with the Autolite plug.

Q. (By Mr. Shapiro) Well, more specifically, Mr. Chapman, did you have any particular demonstration shortly before you switched, as to a better performance by Champion in [1065]the after-market? A. Yes. I should say, I think, at this point, that it is common practice in the after-market business for manufacturers of specific components to run sales campaigns, promotional efforts, from time to time to encourage the sale of their particular components through the Rambler dealer in the after-market. In the early part of 1961, Champion had such a program going through our dealers. It was called the Trip of a Lifetime program. And it did demonstrate—well, it was very successful, let's put it that way.

Q. Well, do you have a breakdown of monthly figures during the period 1961, that would be demonstrative of what you have just mentioned? A. Yes. I can give you some figures on that. In January of 1961, our after-market sales of Champion spark plugs were 24,000. In February it was 25,000. In March, 38,000. And in April it was 50,000.

Q. And how did the Autolite sales compare to that during those same months? A. Autolite, in January, was 17,000. In February it was 20,000. In March it was 18,000. And in April it was 24,000.

The Court: What were your channels of distribution in the after-market at that time?

[1066] A. Simply through our franchised dealers. We did not go through any wholesalers or other distributors.

May I add that while these figures would seem most dramatic with respect to Champion, that it was natural to assume that there would be some improvement in Champion and not an improvement in the Autolite because of the presence at that particular time of this promotional campaign, and had the reverse been true the figures might have been otherwise.

Nevertheless, it was a very dramatic sales story, in our judgment.

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[1072] Q. Now, did American Motors, during your tenure, have either the desire or the capacity to manufacture spark plugs itself? A. No.

Q. Would you explain why not? A. The spark plug business is rather unique in that the cost to the vehicle manufacturer for plugs is generally understood to be well below the manufacturing cost of the plug.

The Court: That is for original equipment?

A. For original equipment. Consequently, if we were to manufacture plugs on our own, had we done so, the cost of the [1073] plug, assuming that our cost would be no greater than others, would have been considerably more than what we were paying for original equipment plugs. That would have had to be recouped by sales of plugs manufactured by American Motors and sold in the after-market.

The Court: Were you paying the same price for original equipment spark plugs that the other auto

manufacturers were paying? Q. Insofar as we knew, yes.

The Court: About 6 cents?

A. About 6 cents. That's right.

We did not have an after-market organization nor were we in that business. Consequently, we could not see the opportunity to develop sufficient after-market sales in plugs to warrant a reduction in—or the loss of these very favorable purchase prices on original equipment.

Q. Do you regard, Mr. Chapman, the cost of the original equipment plug, or spark plugs generally, as a major or a minor economic factor in the total cost of your vehicle? A. We would regard it as minor.

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CROSS EXAMINATION

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[1084] Q. All right. Now, you testified with regards to the change from Champion to Autolite as a spark plug brand, I believe you testified that this resulted from promotional activities of Champion which you noted had certain specific results and you were impressed by that, is that correct? A. That was one factor.

Q. What were the others? A. I think if you look at the history, they enjoyed a better after-market position even prior to—

Q. I am sure that is true. A.—the particular contest which you made reference to.

The Court: The question was changing from Champion to Autolite?

Mr. Noble: From Autolite to Champion.

The Court: You said it just the other way around.

Mr. Noble: I am sorry, your Honor.

The Court: I didn't think that was what you meant.

Mr. Noble: Thank you for the correction, your Honor.

[1085] Q. What were the other factors? A. Other than the after-market situation?

Q. Other than the promotion activities which you mentioned. A. Well, I want to make clear now that the promotional activity was not necessarily one contest. We could—if we took a look at the figures prior to 1961,—1960, 1959, 1958. Now, beyond that, and I don't believe it was a major consideration, nevertheless, it is a part of the record, our engineering department had in some instances preferred the Champion plug on some engines. However, I don't feel that was a determining factor in the case. I think it was the after-market situation.

Q. Did your engineering department prefer the Champion plug on the engines on which Autolite plugs were then being used? A. Some engines. You see, we bought several different kinds of plugs; they varied from engine to engine, from compression ratio to compression ratio, and—on some of these our engineering department had a preference.

Q. Were there any instances in which a Champion plug was being used in which they would have had a preference for Autolite? A. Not to my knowledge.

Q. Well, this after-market activity of Champion which you indicate was your major reason for the change, this was [1086] not a new development in 1961, was it? A. No.

Q. As a matter of fact, do you know for how long Autolite had been either a partial or full supplier of OEM spark

plugs to American Motors or Nash-Kelvinator, its predecessor? A. I think you can go back to the early post-war years, I am speaking here of World War II, if you want to start that far back, and for two or three years we used AC spark plugs.

Q. Well, maybe I can help you on that,—

The Court: You say for a few years after World War II? A. That's right.

Q. Government Exhibit G-160, in evidence, indicates that at least starting with the period 1937, from 1937 through 1952, Nash-Kelvinator had split sourcing between AC and Autolite. For the period 1952 through 1954, Autolite was the sole supplier to Nash-Kelvinator. For a short time after the creation of American Motors, Autolite was the sole supplier of American Motors. And from 1955 through 1961, sourcing was split between Autolite and Champion.

Would that be about correct?

A. Yes, yes, I would assume those figures are correct.

[1087] Q. So that Autolite had been a supplier on at least a partial basis and sometimes on a 100% basis since 1937? A. That is right.

Q. While I am on the point, do you know why in 1952 Nash-Kelvinator stopped sourcing to AC? A. Yes. They raised the price.

Q. To what, from what? A. On original equipment plugs.

Q. To what and from what? A. Well, it went about 50% higher, as I recall it, than—perhaps it wasn't that much—than the other prices that prevailed in the market.

Q. Than other suppliers were willing to— A. Yes.

Q. Have the other suppliers continued since 1952 to supply you at the same price at which they were supplying

you at that time? A. Well, I don't recall the price back in 1952, but there has been no movement that I can recall, in recent years, off that six-cent figure.

Q. So the price at which AC was willing to supply you was higher than you are presently paying or at the time you were there, you were paying your suppliers? A. That is right.

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[1093] Q. (By Mr. Noble) Well, at any rate, for the period after the merger until 1961, Autolite remained at least a partial supplier, isn't that correct? A. That is correct.

Q. And in June of 1961, the decision was made to change that? A. That is right.

Q. And your testimony is that that had nothing at all to do with the fact that Autolite was acquired by Ford; is that correct? A. That's right.

Q. That was just a coincidence? A. That's right.

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Deposition of Earl Richard Fiene, Vice President and Director of Marketing, Prestolite Division of ELTRA Corporation

DIRECT EXAMINATION

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[1140] "Q. Now, you have spoken of the general product lines of the corporation, and now I would like to get back specifically to the product lines of The Prestolite Company and ask you what the major product lines of The Prestolite Company are. A. We are in four basic product categories in terms of our automotive line of equipment. I will start with the largest segment of it which is incidentally our EPG or Electrical Products Group. This embraces, in effect, five plants, one located in Decatur, Alabama, Bay City, Michigan, Syracuse, New York, Sarnia, Ontario, and a service parts warehouse in Detroit. In these plants—would you like these broken down by plant in terms of product incident—

"Q. Not necessarily. A. —or a summation of the products?

"Q. Only if it is more convenient for you, but other than that it is not of any interest to me as to [1141] what plant each part is made in. A. In these plants we manufacture spark plugs, a full line of ignition goods, which would be contacts, condensors, voltage regulators, distributors, and then into the so-called rotating equipment, which would be alternators, generators, starting motors. We manufacture lamps, we manufacture a line of hydraulics, we manufacture a complete line of fractional horsepower motors such as for windshield wiper application, for window lift mechanisms, seat controls and so on. Our Detroit facility of course, as the name implies, is a service parts warehouse feeding our various facets of the market.

"Q. Do you in your Electrical Products Group manufacture horns? A. We do at our Bay City Plant.

"Q. Do you manufacture ignition coils? A. Well, perhaps I should go back. I identified our electrical products. We manufacture coils but they are identified with our Wire and Cable Group, basically because of the material content.

"Q. So in addition to the rest of your Electrical Products Group, the production of wire and cable is one of your products? A. That is correct. We have three facilities for wire.

[1142] "Q. And I believe you mentioned contact points, did you not? A. Yes, contacts and condensers both. That is made at Decatur.

"Q. Now, in addition to your Electrical Products Group as you have described them, do you manufacture any other products that are not in that group? A. Yes. We have battery facilities made up of five producing plants in the States plus a container separator facility in Niagara Falls, we have three producing plants in Canada plus a container separator facility in Toronto.

"Q. Any other Products Group? A. The Wire and Cable made up of three plants. This serves the—not very much in the appliance end but very definitely the aircraft and automotive application of primary and secondary ignition wire, battery straps, ignition coils, and a recent development in the so-called sophisticated ignition area, a contactless—what we call a CD-65 ignition system, transistorized ignition system, and then of course we go from that to our iron foundry in Fostoria, Ohio and our white metal tool casting plant in Woodstock, Illinois.

"Q. Your die-casting operations are included in those [1143] two plants you just mentioned? Is that true? A. That is correct.

"Q. Now, in the course of your activities in the manufacture and distribution of your automotive parts, are you a member, as a firm, in any associations, trade associations, in that industry? A. Yes. We are members of various trade associations, each of them having what we feel is a singular utility or selfish motivation in terms of why we belong.

"Q. Well, would you name each association that your company is a member of, and as you go down the list, if any of your own personnel is an officer or an active participant as a director or officer in any of those associations, would you indicate that. A. Yes. We would start with the AABM, which is the American Association of Battery Manufacturers. Mr. William Ray, who is Vice-President and General Manager of our Battery Group, is currently President of that Association.

"Q. That is R-a-y? Is that correct? A. That is right. The next would be the Automotive Electric Association identified as AEA. I am Vice-President, a member of the Board, and Chairman [1144] of the Manufacturers Group of that Association. We belong to ADMA, which is Aircraft Distributors Manufacturers Association. Walter Powell—I am not certain if he is currently a director, but he is a past officer of that association. We are also active in MEMA, which is the Motor Equipment Manufacturers Association; AWDA, Automotive Warehouse Distributors Association; ASIA, which is the Automotive Service Industry Association. Have I missed any letters in the alphabet?

"Q. I think you may have. How about the SAE? A. This is the Society of Automotive Engineers. Our company is very active in that and Paul Allmendinger, who is Chief Engineer of our Electrical Products Group, is a Past Na-

tional Director for that Association. He is currently active as Chairman of the Fall Meeting of the Detroit Chapter.

"Q. How about the GCMA? A. I don't recognize that one.

"Q. The Golf Carts Manufacturers Association. A. Oh, my goodness! Yes. That is a relatively new one, and we do belong to the Golf Carts Manufacturers Association, you are correct. Also I might add that I just came from a meeting of the Automotive Sales Council of which I am a member. This is made [1145] up of sales executives of 100 of the major companies in the country.

"Q. Mr. Fiene, in the course of your testimony you identified what you called the Electrical Products Group, and I wonder whether this is a group which has vitality in your operations. Do you keep your books and records in terms of an Electrical Products Group? Do you consider your marketing operation in terms of the Electrical Products Group? Do you have studies made in terms of the Electrical Products Group that you have testified about? What is that group significance? A. EPG, which is the Electrical Products Group, in terms of definition is a very important segment, in terms of dollars of sales it is the most important or the highest in volume in dollars of sales of our four Prestolite groups. We have chosen a course of marketing by markets, and as a result of our studies, our manpower allocation, our field organization is geared accordingly.

"Q. And the Electrical Products Group has in it the products as you have identified them earlier? Is that correct? A. Yes."

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[1151] "Q. Just take that group, the electrical products plus batteries, wire and cable in 1960, when it was Electric

Autolite, and compare it as to sales volume with Prestolite in 1965. Would you say that it is higher, lower, or substantially at the same level? A. If I am able to compare like product lines in [1152] 1965, the year you refer to, and 1960, our volume would be basically at the same or a higher level in terms of production.

"Q. Approximately what level are we talking about in terms of millions of dollars of sales? A. This would be in excess of $150,000,000.00.

"Q. Per annum? A. That is correct."

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CROSS EXAMINATION

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[1299] "Q. What prices were you offering those companies for original equipment products? A. We would have offered Chrysler a six cent plug. The bulk of these would have been in the 25 to 30 cent range. Chrysler would probably be the only exception. American Motors would have been an exception, although our presentation to American Motors was on the basis of the 30 cent plug. Are you familiar with the concept of why we offer [1300] a 30 cent plug or 25 to 30 cent range plug? Is that interesting to you?

"Q. It would be of interest, yes. A. The basis being that these people have not been in the replacement end of the business as such, and we pointed out that with our responsibility, with our program they would tie their dealers to them more closely because of the brand identification, and they would be selling more replacement plugs, and the net return to their company would be better in terms of our proposal.

"Q. These would be the people that you would be offering the 25 cent plug to? A. Yes. Now again the volume

of Chrysler, the stature of it on OE identification and the position it would put us in, and knowing what the competitive situation would be in a case of Chrysler, we would have no choice but to go the competitive route.

"Q. You indicated that—or did you indicate that you offered the 25 to 30 cent range for American Motors? Is that correct? A. We talked both to them, gave them the choice in effect.

"Q. I see. Did you know the price that Champion was [1301] offering plugs to American Motors? A. Yes, yes, we know the price that they offered.

"Q. It was in what range? A. Six cents.

"Q. Do you know if any of the other companies on the list are accounts of Champion? A. Chrysler is, American Motors. I don't know about the others.

"Q. I wonder if you could tell me what companies you presently sell original equipment plugs to. A. John Deere, Oliver, Case, and I believe Mack Truck is on our list too."

* * * * *

A. Oliver, Case, Deere, and Towmotor.

"Q. These are the four companies that you are presently selling original equipment plugs to? A. Yes.

"Q. And the John Deere sales are in what price for original equipment plugs? A. Thirty cents.

"Q. And Oliver? A. They're all in the same price range.

"Q. They are all in the same 30 cent price range. [1302] Now, are all of them selling Prestolite or are they selling some other plug or some other brand name? A. I think you will find that all of them to one degree or another are using a second brand because of the indicated customer requirement, consistency and fleet operations and so on. If a man is, you might say, bent on a certain brand, sort of the AC thing or the Champion thing, then there is some

basis for them continuing with that so they don't have duplication of service parts or duplication of inventory, so they may have some customers specifying a brand.

"Q. Now, when you sell—I may have confused it—when you sell John Deere for OE, do you sell them all Prestolite Plugs or do you sell them some other brand? A. Only Prestolite.

"Q. How about Oliver? A. Only Prestolite.

"Q. Case? A. Prestolite.

"Q. And Towmotor? A. Prestolite.

"Q. Do you sell any plugs, either Prestolite or [1303] private brand, to International Harvester for replacement? A. Other than the transition in terms of Autolite, no.

"Q. At the present time you do not? A. That is right.

"Q. So that at the present time the Scout vehicle that they make does not have your plug in it? Is that correct? A. That is correct.

"Q. And the various distribution systems that International Harvester has do not purchase plugs manufactured from you through the International Harvester system? Is that correct? A. Through the International Harvester system they do not.

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[1314] "Q. Now if we can go to spark plugs—and I will try not to mention batteries, and I will probably get it the other way now—you indicated in your Decatur, Alabama plant you have capacity for future expansion. Now could you tell me that again. What do you consider that you have available for future expansion there? A. In terms of square footage?

"Q. Well, what are you talking about when you are talking about capacity? A. We have a very modern facility. It is a plant [1315] that is less than five years old. We

have an air-conditioned area which is compatible and desirable in terms of spark plug manufacture, so that you have a minimum of contract expansion characteristics in your make-up. We have additional area in the present lay-out to handle the expansion of our plug program, and if this is exhausted or utilized, then we have plenty of ground to push a wall out and build more plant to take care of our plug needs.

[1316] "Q. So when we are talking about 'capacity,' we are talking about the physical capacity of the building and the way it is laid out? A. That is correct, and the capital equipment to manufacture and fabricate.

"Q. Are you talking now about the equipment that manufactures the plugs? A. Yes.

"Q. You have enough equipment for substantial expansion at the present time? A. We could produce more plugs with our present equipment by going on a multi-shift basis.

"Q. But at the present time you are operating at capacity unless you go on a multi-shift basis? A. Yes.

"Q. Now, do you have any facilities or does your company have any facilities for making the ceramics for your plugs? A. We have modest facilities in our Sarnia, Ontario Plant. We have no functional facilities in the States.

"Q. I see. And where do you get your ceramics for the plugs? A. From the General Parts Division of Ford Motor Company. We also procured a percentage from [1317] overseas sources.

"Q. The only domestic source you have is the Ford Motor Company at the present time? A. That is right.

"Q. And the overseas source was what country? A. Well, this would have been for foreign and export requirements, and this would have been Japan, the same source that AC and Champion use as a matter of fact.

"Q. What percentage approximately of your ceramics do you purchase from Japan today? A. It would be less than 10 per cent.

"Q. And would this be generally true from the start-up of the Decatur Plant? A. Yes.

"Q. In other words, your overseas sourcing wouldn't be over ten per cent for the period 1961 through 1965-66? A. That is right.

"Q. Do you know of any other source of ceramics in the United States for your plugs? A. Yes.

"Q. And who would they be? A. General Battery & Ceramic Company.

"Q. Anyone else? [1318] A. That is the only one, I believe it is the only other approved source that we have, engineeringwise.

"Q. Have you ever purchased any ceramics from GB&C? A. Yes.

"Q. When was this? A. This would have been very early in '61 and '62.

"Q. And you discontinued them? A. That is correct, on the basis of quality.

"Q. You were not satisfied with their quality? A. That is correct, and our customers had similar concern about the quality and performance of their product.

"Q. Now, you testified that Prestolite reentered the spark plug field in 1964. Is that correct? A. The independent after-market.

"Q. This is the independent after-market? A. Yes, sir.

"Q. And were you selling to the—first let me ask you, what is the independent after-market? A. This would be other than an original equipment maker or supplier.

[1319] "Q. I see. A. Independent warehouse distribution.

"Q. I see. Were you selling plugs under a name other than Prestolite to the independent after-market between the period of '61 and '64? A. Yes, sir.

"Q. And what brand was that? A. UDS would be one brand.

"Q. Excuse me. If I can shorten it, it would be under the brand name of the purchaser? Is that correct? A. Yes.

"Q. It would not be under the brand name owned by ELTRA? Is that correct? A. That is right.

"Q. Now, you testified that you were presently selling spark plugs to approximately 50 warehouse distributors. Is that correct? A. Yes, sir.

"Q. And I think you testified that this was about the same number that you were selling in, say, 1960, the same number of distributors? A. No, I don't believe I testified to that effect. I thought my testimony there had to do with our level or penetration level with the AEA type of warehouse, our '66 and '60 relationship in terms [1320] of numbers, and the warehouses I so identified were about the same.

"Q. I see. A. I think we sold spark plugs under the Autolite program to perhaps more than—we used to think in terms of 45 to 48 key warehouse distributors in AEA that provided the bulk. Then we had a few others that sold spark plugs or parts of the line rather than full-line warehouse distributors, and the number that was mentioned here involved with us strictly on spark plugs—oh, excuse me—the current AEA are with us on the original equipment service parts line, no plugs, no batteries."

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Redirect Examination

By Mr. Shapiro:

"Q. Mr. McManus asked you about the presentation that you made to American Motors in connection with spark plugs. Do you recall that? A. Yes, sir.

"Q. And you said that you gave them your choice of either six cents or a 25 to 30 cent range. Do you remember that? [1321] A. Yes."

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"Q. If they wanted to buy Prestolite Brand spark plugs for six cents, would you have sold it to them, or original equipment? A. I would have.

"Q. Indeed! Well, would you have matched Champion on whatever price Champion offered American Motors in order to get that original equipment account? A. I would have.

[1322] "Q. Now, Mr. McManus asked you about your sale of spark plugs to Case, Deere, Oliver, and Towmotor. Do you remember that? A. Yes, sir.

"Q. Now, Mr. McManus asked you about your sale of spark plugs to Case, Deere, Oliver, and Towmotor. Do you remember that? A. Yes, sir.

"Q. And I think you testified that all of those customers purchased from you in the 25 to 30 cent range? Is that correct? A. Yes.

"Q. Do each of those companies also purchase from Champion? A. I would feel that each of them do buy a percentage of plugs from Champion currently.

"Q. Well, now, would Champion, as far as you know, have been willing to sell to those four customers all the spark plugs they needed for original equipment at the six cent price? A. Yes.

"Q. Well, did those people find it to their advantage to buy some of their spark plugs from you in the 25 to 30 cent range rather than from Champion for six cents? A. Yes.

[1323] "Q. Why would that be? A. Because in terms of —let us use John Deere, if we can, as an example. Champion in effect was getting all of the replacement business at the expense of their original equipment customers. This is historically true. What we were saying to them was we will sell you this 30 cent plug. This is your Prestolite Brand available from you to your dealers, to your branches and your depots. They can't get this from, in effect, other sources as can these dealers get Champion Brand from other sources, so that we tied—and this is one of the motivations in business, to tie your dealership to you as closely as you can with legitimate programs and presentations and product representation, and with Prestolite they could have done this, and we satisfied them that they would sell more because of having the original equipment installation, the dealer having the replacements available, getting his replacements from source was a better program for them and the economics were proven."

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[1324] "Q. Well, does that mean that these customers, Case, Deere, Oliver and Towmotor, are now selling in the aftermarket your Prestolite plug in competition with Champion's sales of Champion plugs for the same application? A. That is correct.

"Q. And do I understand that they have actually taken some business from Champion with their Prestolite plugs? A. Right."

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[1325] "Q. Mr. Fiene, what exactly was your sales pitch to these customers as between the system where they

were buying all from Champion and the system where they would be buying at least some of their original equipment spark plugs from you under the Prestolite Brand? A. One approach to these customers was predicated on the success they had had. The plug presentation followed the battery relationship presentation. They had had outstanding success with the acceptance of the Prestolite Battery Brand Program. The same is evidenced by the interest today on the part of the International Harvester in the Prestolite Brand, which wasn't evident in prior years, and we pointed out to them that with any reasonable ratio, like two and a half replacements to one original equipment, the John Deere Company would and could make money. The turnover in terms of a tractor is about 12 to 15 sets of replacement plugs to one original equipment set of plugs in the life of a tractor, and in automobiles it is in the area of 7 to 9 replacement plugs to every original equipment plug."

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[1326] "Q. Now, before you made your promotion and before you got your program into these four customers, were they selling substantial spark plugs of any brand in the aftermarket?

A. No.

"Q. To the extent that replacements were needed for their original equipment vehicles and other types of equipment, who was making those sales in the aftermarket? A. Champion by the nature of their program would have been probably the leader. Other brands would have been evident but Champion probably the strongest.

"Q. Actually then did these customers feel that they would get an economic benefit from purchasing 25 to 30 cent plugs from you and selling in the aftermarket, over the system that they had of buying the six cent plug from

Champion and not selling in the aftermarket? A. That is right.

"Q. Now, with respect to a customer which was already selling substantial spark plugs in the aftermarket, such as Chrysler or American Motors, would the six cent price be one that you are [1327] willing to give? A. Yes. You are familiar with the point in time that Chrysler was not in the independent aftermarket per se. Up until the introduction of their Mo-Par program the original Chrysler wholesaler sold some parts in the independent aftermarket, but precious few.

"Q. But with the introduction of the Mo-Par program they are selling more? Is that your statement? A. Yes."

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[1329] "Q. Do you find it is economic insofar as you have imported Japanese ceramics, to use Japanese ceramics in the manufacture of spark plugs? A. The economics are justified; the practicability of the program leaves a lot to be desired: Communication, length of time in transportation and so on. It is a very complicated procedure.

"Q. Do you think that you could within the limits of practicability increase your percentage of foreign ceramic supply beyond ten per cent? A. Very readily. We would love to.

"Q. Up to what percentage of supply do you think it would be practicable at your present level of spark plug manufacture, what percentage of your requirements? A. Well, from a capability standpoint they could handle 100 per cent. We feel that from the competitive influence standpoint and the other factors of communication and time, we would keep a domestic source.

"Q. To what extent though of your requirements? [1330] A. I don't have any way of assessing it really.

"Q. Well, let me ask you this question: Do you think that you could get 50 percent of your requirements from the Japanese source and 50 per cent from a domestic source, and find this practicable and economic, and, if not, what percentage do you think would be the breaking point? A. See, the volumes are related to your types and the number of brands that we made. Our insulators have a different configuration by customer. This is for merchandising, for control of warranty, claims and so on and so forth, so that you get into quantities here. I would have to devote some time to studying the requirements by brand and the movement by brand before you could say yes or no.

"Q. But you feel it would be in excess of ten percent? A. Very definitely.

"Q. Now, you testified that you approached Chrysler and you have approached American Motors for their original equipment business. Is that correct? A. Yes.

"Q. Suppose you were to get original equipment business from Chrysler, say. Would you be able to [1331] develop ceramic capability sufficient to fulfill that requirement? A. Yes. We in effect—and I think Mr. Spiller would have to counsel me on this, but we had ceramic facility in stand-by. We bought complete ceramic capability and facilities from a company in the East, moved it to our Decatur Plant and had it on stand-by, and then because of growing need in the overseas market, we have negotiated, or there was a negotiation between ourselves and a licensee who has taken this. He had more urgent need in that sense. Is that basically correct, Dave?

Mr. Spiller: A subsidiary of ours in Venezuela is going into that business.

"Q. One of your subsidiaries has taken that equipment and is going to manufacture spark plugs with it in Venezuela? Is that it? A. South America.

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"Q. But my question to you was as to your current capability to develop ceramic capacity sufficient to supply Chrysler if they should say yes, we [1332] will buy plugs from you for original equipment purposes. Could you do it, and, if so, how could you do it? A. We have all of the basic formats for this, as I say, a modest capability in our Sarnia, Ontario, Plant. We have the people and the technology to make ceramics. This is readily available to us and we could within the time element get machine tools and so on—this is all the wheels and what-have-you, the ovens—this is all we would need at that time, the firing equipment.

"Q. So if Barcus were willing, you could be prepared? Is that correct? A. Yes."

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"Q. Before we leave the spark plug situation completely, Mr. Fiene, you have testified that the four customers for original equipment spark plugs that you sell to buy in the 25 to 30 cents range. Is that correct? A. Yes. This is for original equipment. The replacement—because this involves a carton and packing and so on, those are identified 'pennies more.'

[1333] "Q. Just 'pennies', is that correct? A. Correct.

"Q. Do you happen to know what the relationship as between your price to Deere and Case and the others for replacement spark plugs bears to Champion's price for replacement spark plugs? Are you under, or what would you say? A. They are in let's say the 45 cent range, so they are higher than we are in replacement sales.

"Q. So if you were to average on the basis of the number of spark plugs you sell for both purposes to your customer all in the 25 to 30 cent range or thereabouts on original equipment and replacement equipment with Champion's six cent price for original equipment and 45 cent approximately as the price for replacements, how would the two compare, if you know? A. Well, if you get to a ratio of let's say two and a half to one, you are at about a stand-off, this is replacement to equipment. If you go beyond the two and a half to one, then the return to interested customers is very interesting.

[1334] "Q. You better say what you mean by 'very interesting.' A. It is more profitable than his present program.

"Q. Does that mean that if he sells more than two and a half spark plugs in replacement to one original equipment spark plug that he is better off under your 25 to 30 cent range than he would be under Champion's six cent and 45 cent range? A. Yes."

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"Q. Now, you mentioned as ceramic sources certain companies. You didn't mention AC as a possible ceramic source. Do you consider that they might be a ceramic source for you? [1335] A. I don't believe they would be interested in our business.

"Q. You don't? A. No.

"Q. Have you ever asked them? A. To my knowledge, no.

"Q. Have you ever asked Champion? A. In a formal way, no.

"Q. Do you think they would sell to you if you asked them to, ceramics? A. No.

"Q. You don't? A. No.

"Q. Well, Ford does, isn't that right? A. Ford does."

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RECROSS EXAMINATION

[1337] "Q. I would like to go back to this pricing of your plugs. Now, when you are talking about selling two and a half plugs in the aftermarket, your new system, once you sell more than two and a half, may be beneficial to the original equipment purchaser? Is that correct? A. Yes, sir.

"Q. This is on the assumption that one of the other suppliers is selling him at 45 cents a plug? Is that correct? A. Yes.

"Q. If he was purchasing then at 30 cents a plug, your system of course would not be interesting to him economically would it? A. No.

[1338] "Q. However, no one has the price level, no one offers the price level that you indicated that you could— A. You said *if*?

"Q. I said *if*, yes. A. Yes, no one does.

"Q. You are sure? A. And no one could.

"Q. You are sure? A. —under their national brand. I am sure of that. We must follow the competitive levels of our majors, which would be AC, Champion, Autolite, and so on.

"Q. Do you happen to know the price that Champion sells in the aftermarket to Chrysler?

"Mr. Shapiro: What brand?

"Q. —under the Champion Brand? A. Under the Champion Brand? I don't know it specifically. I know the general range.

"Q. What is the general range? A. I also know the general range of Mo-par.

"Q. What is the general range of the Champion Brand? A. In about the 35 cent to 43 cent range. See, there are

various discounts that they work out, and I can get the net for you but I don't have it here at my fingertips. The Mo-par Brand is a lower price than the Champion Brand.

[1339] "Q. What area would that be? A. That would be under 30 cents.

"Q. Then the offer as you are making it today wouldn't be competitive with the Mo-par Brand which they are offering? Is that correct? They offer six cents and 30 cents for Mo-par? Is that correct? A. Yes.

"Q. So that the price that you are offering between 25 and 30 cents— A. Now wait. They are doing what under the Mo-par Brand?

"Q. They are offering original equipment at six cents and offering Mo-par at about 30 cents. Is that correct? A. Yes, less than 30 cents.

"Q. Yes. So your proposition of offering them at between 25 and 30 cents for original equipment and a few cents more for replacements wouldn't likely be economically advisable for them, would it? A. I would match Champion on the Mo-par Brand price level at Chrysler Corporation."

* * * * *

[1342] "Q. I see. But despite all of your offers to date, you have not sold a six cent plug for original equipment? Is that correct? A. That is correct.

"Q. Now let me ask you this: To your four customers that you have here that we were discussing, your four original equipment customers—this is something I don't understand—you indicate that you sell them original equipment in the 25 to 30 cent range and a few cents more for replacement. Now, you don't mean to say that you are not going after the replacement business that they might sell to? A. I know what you are asking me and I am not sure that I can—maybe you better rephrase or restate that, be-

cause I don't want to be in conflict and indicate that I am not competing in the marketplace. I am competing in the marketplace.

"Q. All right. Well, you sell to J. I. Case, John Deere —excuse me—you sell to John Deere? A. I can answer this way, that I am sure that some of our independent outlets are in some cases contacting [1343] the John Deere or the J. I. Case or the Oliver outlets. What success they have had in selling them plugs I don't know, because there are many things that happen at the local level. They may be lodge brothers, they may be buying equipment from him, and as a result some of these things get washed out in terms of basic policy and philosophy and program from headquarters as compared with what actually happens in Oklahoma or Indiana or some place like that. It is possible some of our Indiana jobber dealers are selling some Prestolite plugs to a John Deere dealer.

"Q. Is it your intention not to sell to John Deere dealers? A. No. They can go any way they want.

"Q. Now, in addition to Champion, for example, selling to the John Deere dealer in the aftermarket, Ford would also be offering plugs to that dealer. Isn't that correct? A. Yes.

"Q. And so would AC? A. Yes.

"Q. And so would anyone else that might be in the market? A. Yes.

[1344] "Q. Now, you indicated that— A. But they couldn't offer them Prestolite Brand if this is original equipment with them.

"Q. Now, there is no provision that the John Deere dealer has to stock only the Prestolite Brand, is there? A. He stocks more than one brand in almost every case.

"Q. There is no requirement that he has to stock your brand? A. That is a question you have to ask John Deere. I don't know their policy.

"Q. It is no requirement of your company that he has to? A. Absolutely not.

"Q. So the dealer is free to stock a Ford Autolite Plug if he so desires? A. You see, the ramifications here just go on and on and on.

"Q. What I am getting at is that, as I understand it, the John Deere dealer is an independent company and he can buy Prestolite Plugs or he can buy Autolite Plugs. Isn't that correct? A. That is correct.

[1346] "Q. Now, you indicate that you have the ability to make ceramics in case you get an order from say, Chrysler, is that correct? A. We would have to get into the ceramic business.

"Q. You would have to get into it? A. Yes. We have the know-how, we have all the blueprints, we have all the technology and research behind us. It is a case of getting in the manufacture per se.

"Q. But despite all this ability, you shipped your equipment—"

Mr. McManus: I am sorry. I withdrew that question, your Honor.

Skipping to line 16:

"Q. Well, we will just make it clear that the ceramic equipment that you bought—from what company? A. I didn't state the company because—it sticks in my mind perhaps, Mr. Spiller, it is a company in New Jersey. That is as close as I can come to it at the moment.

"Q. The ceramic equipment that you bought for making ceramics for spark plugs has been shipped out of the country to Venezuela? Is that correct? A. Yes, sir."

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Deposition of Arnold W. Hartig, Vice President and Director of Purchasing, Chrysler Corporation

DIRECT EXAMINATION

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[1359] "Q. Now with respect to spark plugs, what was your source or were your sources of supply for automotive purposes up to 1961? A. We purchased all of our automotive spark plugs from Electric Autolite up to 1961.

"Q. And this was under the Autolite brand, I assume. A. This is under the Autolite brand.

"Q. Do you recall whether there came a time when you heard of the acquisition by Ford Motor Company of certain of the assets of The Electric Autolite Company that included the Fostoria spark plug plant, the trademark 'Autolite', and the Owosso battery plant? A. Yes.

"Q. Do you remember in relation to the time that it occurred when it was that you heard about it? Was it the same day that it occurred or was it a week later, earlier, or what do you recall? A. I don't recall having any knowledge of it other than in the papers, and this I'm assuming would be a day or two following its accomplishment.

"Q. Following your learning of the acquisition, did you have offers for supply of spark plugs from several different sources? [1360] A. I can't speak of personal knowledge in this respect. My recollection is that this is in the spring of 1961.

"Q. It was in April. A. I became the Director of Purchasing in January of 1962, but I had responsibility for the engine plant, which was the ultimate consumer of spark plugs in this period of time.

"Q. Well, in the course of your duties both before you became Director of Purchasing and after you became Director of Purchasing, did you learn that offers to sell spark plugs had been made to Chrysler Corporation? A.

I know that such offers were made by at least Champion at that time.

"Q. Did Electric Autolite, which has now become Eltra, offer to continue to sell you spark plugs? A. Yes, Electric Autolite offered to continue to sell spark plugs to Chrysler.

"Q. And did Ford Motor Company seek your business? A. Ford Motor Company did seek our business.

"Q. And you decided to do what as to these three offers? A. We decided that Chrysler's best interests would be to change our sourcing to Champion.

[1361] "Q. Can you state in fairly brief terms what your basic reasons were for the shift to Champion? A. We felt that the Champion name would serve Chrysler better because it now was going to be available in the sense that it wasn't associated with any other large automotive manufacturer. The Champion name had always been a good name, and we felt that the engineering relationship and the relationship in the after-market would be one that would serve us best.

"Q. When you speak of your relationship in the after-market, are you speaking of sales promotion and activities of that type? A. That's what I'm speaking of.

"Q. Did you consider Champion was excellent in the area of marketing support and sales promotion in the after-market? A. They had been extremely successful in this area, and we considered them to be excellent and knowledgeable in this field.

"Q. What benefit did you expect to derive from that kind of marketing activity? A. An increased distribution of spark plugs through Chrysler's distribution system.

"Q. It took Champion a little while, I would assume, [1362] to qualify their spark plugs for your use and to set up for your supply; is that correct? A. That is correct.

"Q. And did you, during the period that this was going on, purchase some Autolite spark plugs from Ford Motor Company? Yes, we did.

"Q. Now, I take it your sole source is Champion; is that correct? A. Yes, we buy all of our spark plugs from Champion.

"Q. With respect to your original equipment spark plugs, do all of them bear the trademark 'Champion'? A. They do not.

"Q. What other trademark do you use on your spark plugs? A. MoPar.

"Q. Do you know approximately which proportion of spark plugs for original equipment purposes bear the 'Champion' trademark as distinguished from 'MoPar'? A. Approximately 75 per cent of our original equipment spark plugs bear the name 'Champion'.

"Q. And 25 per cent bear the trademark 'MoPar'? A. That is correct.

[1363] "Q. Do you use the trademark 'MoPar' on some proportion of your replacement spark plugs as well? A. Yes, we do.

"Q. When you sell your spark plugs through your Chrysler distribution system, your Chrysler dealers, what trademark do they sell under? A. They sell under the trademark 'Champion'.

"Q. And when you sell spark plugs through your individual distribution setup, what trademark do you use? A. MoPar.

"Q. Since the decision that you made and implemented to switch your supply to Champion, has Electric Autolite Company, now Eltra, continued on any regular basis to solicit your business? A. Eltra Corporation continues to do business with Chrysler in a regular and continuing way

and from time to time have discussed, solicited the possibility of getting back into the spark plug business.

"Q. Are they speaking in terms of a competitive price and competitive service? A. Oh, yes.

"Q. Do you consider them an alternative source of supply in the event that you were at some time [1364] to want an alternative source of supply? A. Yes, we would.

"Q. You regard them as a current alternative source of supply of spark plugs; is that correct? A. We would.

"Q. How about Ford Motor Company, do you regard Ford Motor Company as an alternative source of supply? A. We would regard the Ford Motor Company as an alternative source of supply.

"Q. Would you regard General Motors as an alternative source of supply? A. We would.

"Q. I assume that when you speak of an alternative source of supply, you are referring to the MoPar brand spark plugs; is that correct? A. Yes. We certainly would not, I don't believe, propose to buy spark plugs from the Ford Motor Company under an Autolite brand. However, we would consider the Ford Motor Company supplying a MoPar spark plug as an acceptable supplier. I do not believe that we would like to buy spark plugs from General Motors under an AC brand, but we would consider General Motors an acceptable source of a MoPar spark plug.

"Q. The use, then, of the MoPar brand on spark plugs [1365] has increased your flexibility to some extent in terms of sourcing; is that correct? A. We believe that it has.

"Q. This development of the use of the MoPar brand on spark plugs has not been an isolated thing in your organization, has it, in terms of philosophy? A. Our corporation has become very much alert to the need for a corporate

identity symbol in distribution and redistribution; and to the extent that other names perhaps don't lend themselves to this as much, we have concentrated on the development and use of Chrysler identity symbols, such as Chrysler and MoPar."

[1367] "Q. Has Ford Motor Company solicited your business since [1368] the time of the acquisition? A. They have.

"Q. In the spark plug field? A. Yes.

"Q. Did you ever, since that time, discuss with Ford the possibility of their submitting a bid for spark plugs, or did you solicit such a bid from Ford Motor Company at any time? A. I don't believe the words 'solicit a bid' are perhaps descriptive of what happened, but they did come in and reviewed with us the very point that you are making: Would we consider Ford to be an acceptable source? And my recollection is that I told them that we would under a private brand to be designated by us, and at that point of time, the representatives were going to talk to Ford management to determine whether or not there was going to be effective capacity to make a proposal to Chrysler and that sort of thing.

"My recollection is that we never did get a definite response from them in terms of a specific proposal of price, and since our relationships with Champion were good, we didn't press the point.

"Q. Would Chrysler Corporation be in a position from an economic or a financial standpoint to manufacture [1369] spark plugs itself if it so desired? A. It would.

"Q. Have you sustained, as far as you know, any competitive disadvantage in any aspect of your business resulting from the acquisition by Ford Motor Company of the elements of the Electric Autolite Company that I mentioned earlier in your testimony? A. We do not think so.

"Q. Do you anticipate in the future that you will sustain any such competitive injury from that acquisition? A. I do not think so."

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CROSS EXAMINATION

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[1378] "Q. Now if we could go to the 1961 period when you decided to take on Champion as your supplier for spark plugs; you testified, I believe, that for a period of time you bought some Autolite plugs to carry you over until Champion could supply you fully. A. That is correct.

"Q. Was it necessary for Champion to qualify as a supplier for Chrysler? A. Yes, it was.

[1379] "Q. And what would this entail? A. It was primarily in this instance an engineering qualification. The qualifications from a purchasing point of view were pretty obviously already met in terms of financial responsibility, in terms of a capacity to serve Chrysler, in terms of a desire for Chrysler business, and in terms of economic factors which we had developed. So the qualification was in terms of having a product which could properly serve our power plants.

"Q. So you say your principal problem was an engineering problem? A. That is correct.

"Q. To qualify them from an engineering standpoint? A. That is correct.

"Q. In a general way, could you tell me what this would entail? What do you have to do? A. We would have tests run under various conditions, temperature endurance under unusual circumstances where perhaps spark plugs had particular problems under a certain environmental type of condition, whatever the engineering test would be for that kind of thing.

"Q. Now, did you have engineers from Champion come here [1380] to Chrysler and work with you on developing this? A. Yes, we did.

"Q. Did you have engineers from Chrysler go to Champion and work on this? A. Yes, we did.

"Q. Would you have to send maybe your Chrysler engine down there to Champion to test it? A. I think that there was very little of the Chrysler engines going to Champion that we would send down. However when a program like this starts, the supplier immediately gets a variety of Chrysler engines, you see, on his own through the retail outlets of Chrysler dealers and buys Chrysler products, having our various engines, and they themselves would embark upon a program. Our own engineering people would embark upon a program. All of this would be dovetailed together. I know that there were problems with respect to the ceramics in the sense that their construction was different than the Autolite construction, and there were problems, I believe of shielding and that sort of thing that had to be worked out.

"Q. Now since you have taken on Champion as a supplier, I assume that there have been changes made in the Chrysler engine in the period from 1961 to date [1381] Is this correct? A. That's a rather broad question. Yes, there have been changes made in the Chrysler engine in the sense that we have changed displacements, but we are using the same basic engines as we identify them—that is, A, B, and G engines—that we were using at that time.

"Q. Well, is it necessary that the Champion people work closely with you every year on the engine that you are going to put in your next year's model? A. If there is a change in the engine, it is necessary. However, sometimes there is no change in an engine which would require a spark plug change.

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[1384] "Q. So if everything else was equal you would prefer to have an independent spark plug manufacturer rather than Ford Motor Company? A. That is correct.

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[1386] "Q. In other depositions, we have been informed that it is the custom in the industry to sell spark plugs for original equipment purposes at approximately six cents. Is that your understanding? A. That's my understanding.

"Q. And that for replacement purposes, the same spark plug will be sold for approximately 38 cents. Is that your understanding? A. That is not quite correct.

"Q. Would you mind giving me an approximation? A. It would be something less than that.

"Q. Thirty-five to thirty-eight cents, would that be fair? A. That would be the range, yes.

"Q. Now, in regard to the Champion plug that you buy [1387] for original equipment, you purchase that at approximately six cents; is that correct? A. That is correct.

"Q. And for replacement, you purchase the Champion plug at approximately 35 to 38 cents; is that correct? A. Yes, with some somewhat lower.

Q. But it would be in the range of 30 cents somewhere? A. Or high twenties.

"Q. Now, in regard to the MoPar original equipment plug, what price do you pay for that? Is that in the six-cent range? A. Yes.

"Q. And the replacement range would be the same as for the Champion plug? A. It is in the high twenties.

"Q. To your knowledge, do you know if the six cents that is charged for the original equipment plug is below the manufacturer's cost of that plug? A. I have understood that it is below the manufacturer's cost."

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"Q. What is your understanding of why he will sell it below cost? [1388] A. He is selling it below cost because he wants identity of his product with our product, with the hope that this will enhance his replacement market.

"Q. So that it is your understanding that he hopes by placing his product in your automobile that it will generate aftermarket sales for him; is that correct? A. That is correct.

"Q. And as a result of this generation of after-market sales, he will recoup whatever loss he makes for his original equipment plugs? A. That's correct.

"Q. Now, in regard to purchases of spark plugs for your replacement market, could you give me a percentage of breakdown on Champion and MoPar? A. No, I can't. I have told you the areas of distribution that they are both involved in. My belief is that our distribution through Chrysler dealer sources is at this time still substantially higher than it is through the independent distribution, with the result that the Champion, which goes through that channel of distribution, would have the higher proportion; but this in the long range might not necessarily be true, that we would be looking for, that is."

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[1397] "Q. Since 1961 has what is presently the Eltra Corporation solicited Chrysler to sell them spark plugs under the Prestolite brand? A. Yes, they have discussed this matter with us.

"Q. And your decision obviously has been not to— A. To continue with Champion.

"Q. Your decision has been to continue with Champion? A. Yes.

"Q. What would be your basis for considering Champion over Prestolite in spark plug brand? A. We still consider

the name Champion to be of great value. While I testified that the trend is in the opposite direction, to have less and less reliance on the non-corporate name, it still is an important name, so that from our total distribution point of view, we would prefer the name Champion to the name Prestolite in terms of the after-market position. In terms of product capability, we certainly consider the Champion to have supplied us with the product and the engineering technology that we are happy with, and I see no motivation there to change."

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[1398] "Q. Now, you have indicated that you consider the Champion name as a more valuable name in the after-market than Prestolite. Is that a fair statement? A. That is correct.

"Q. And presumably at the time that Electric Autolite was selling you plugs under the Autolite name, you considered the Autolite brand name as a better brand name than Prestolite? A. I don't even know if there was a Prestolite name in existence at that time. Was there?

"Q. You just don't know if there was a name in existence? A. I think that the Prestolite was something that Eltra Corporation did after they sold the name Autolite.

"Q. So you at least as a purchasing man were familiar with the Autolite brand but you had never heard of the Prestolite name before Eltra? A. That's right.

"Q. So in your opinion I could see you would believe the Autolite name was a better known name than [1399] the Prestolite name prior to Ford's acquisition; is that correct? A. That's right."

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[1406] "Q. Now, I don't know if I asked you this or not. I asked you in regard to plugs that one of the factors that you would consider in not desiring to purchase spark plugs from Ford or General Motors was the fact that you did not want to advertise a competitor's product. That was correct? A. That's correct.

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[1410] "Q. Now, you said that you think the Champion name is a better name than the Prestolite name. You recall that? A. Yes.

"Q. Do you also consider that the Champion name is a better name than the Autolite name? A. Yes, I do.

"Q. Do you consider that that is true today? A. Yes.

"Q. Do you consider that that was true in 1960? A. Yes.

"Q. Do you know of any time from 1959 forward, for example, when the Champion name, in your view, was not a better name than the Autolite name? A. I don't know.

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Deposition of John F. Karr, Manager, Distribution Planning, Goodyear Tire & Rubber Company

DIRECT EXAMINATION

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[1453] "Q. Now, do your stores and franchised dealers and associate dealers, as far as you know, carry other brands besides the AC spark plugs that they purchase from you? A. Yes, they do in, I would say, most instances.

"Q. What other brands do they ordinarily carry? A. The other brands that they would normally carry would be the Champion and the Autolite.

"Q. Did you, as a company, at one time sell a spark plug under a brand other than AC or Autolite? A. Yes, we did.

"Q. What brand or brands were those? A. We had two brands. One was called the Wingfoot and one was called the Double Eagle.

"Q. Both of those are Goodyear brands, I assume. A. Yes, they are and have been used by the company for some time.

"Q. Now, I have noticed that your central trademark has a symbol between the word 'Good' and the 'year' which appears to be a foot with a wing on it.

"Is that associated with the Wingfoot trademark that you mentioned? A. Yes, it is.

"Q. Now, have you used the Wingfoot and the Double [1454] Eagle, or either of them, in connection with tires over the years? A. Yes, we have.

"Q. Can you tell me when you sold the Wingfoot and the Double Eagle spark plugs? A. We started selling them in 1945 and discontinued in 1948.

"Q. So you sold them only for three years? A. That's correct.

"Q. Do you know why they were discontinued? A. They weren't selling very many of them.

"Q. Well, did you have any trouble having them stocked by your company stores, for example? A. We were able to get them stocked by the company stores. The direct dealers did not stock them to that big a degree and it was very difficult to sell them to the associate dealers.

"Q. Well, when your company stores stocked them, did they also move or did they stay on the shelf? A. They, unfortunately, stayed on the shelf more than we would have liked them to.

"Q. Does that mean that your company stores and your franchised dealers were selling other brands besides the Wingfoot and the Double Eagle? A. Yes, they were.

[1455] "Q. Where were they obtaining those, as far as you know? A. From local suppliers.

"Q. Do you have any idea why your own branded spark plugs failed to sell? A. The people at the service point, the Goodyear store or the dealer or the service station or the garage, who are in charge of servicing the customer's car, very strongly favored the original equipment brands of spark plugs because they installed the spark plug as part of a tune-up, generally, of an engine or some other engine repair and an original equipment quality spark plug is a very strong reassurance to the customer under these circumstances that he is getting quality in the parts and in the service, and it is about the only visible, identifiable piece of hardware that goes into this service work, tune-up kind of work, that he recognizes and, therefore, he can identify quite quickly whether or not a quality brand, a well-recognized brand is being used.

"So the service people have the incentive, therefore, to put on this brand of spark plug, and it also is useful to them in foreclosing criticism of their work later on.

"For example if a customer is [1455A] dissatisfied with the performance of his car, the person who did the service

can respond by saying that 'I did put on the best spark plug available; you can see that.'

[1456] "It also forecloses criticism by a competitor who may see this car later on. The competitor cannot under these circumstances say 'Well, certainly you are having trouble with your car; look what the last guy who worked on it did. He put in this unknown brand of spark plug which is probably giving you trouble.'

"So the installer has a great incentive to use a well-recognized brand of spark plug in his selling of this work.

"Q. Now, you say 'well-recognized brand of spark plug.'

"Is there any tendency to be more specific in spark plug applications than merely a well-recognized brand? A. Well, the ideal situation for an installer of spark plugs is to be able to say to the customer 'I'm putting in the same brand of spark plug that came with your new car.'

"And in many cases, they are able to do this. If not able to say this, they at least can say 'This is the brand of spark plugs that goes into new cars,' and assure a quality by making that statement.

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Testimony of John B. Hodges, Forward Marketing Plans Manager, Ford Autolite Parts Division, Ford Motor Company

DIRECT EXAMINATION

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[1572] Q. (By Mr. Shapiro, continuing) Mr. Hodges, would you look at the figures [in Ex. F-38] for Champion, AC and Autolite under percent of total service stations stocking this brand and state whether any conclusions can be derived as to stocking habits of service stations as included in the group in the title, from the standpoint of original equipment branding? A. Yes, sir. We believe it does, that it indicates that original equipment brands are the brands primarily stocked and almost exclusively, with the only other brand of significance being stocked being the Atlas brand, which is limited, of course, to one type of gasoline service station.

Q. Well, now, Mr. Hodges, if an automobile, a Ford automobile, were to drive into one of the 17 percent that stock Champion exclusively, it would have to get a [1573] Champion spark plug; is that correct? A. Yes, or he would have to go out and buy an AC for a Chevrolet car or Autolite for a Ford car, but normally he would use the thing he has in stock.

The Court: Normally, he would do what?

A. Normally, he would use the type of plug he has in stock.

The Court: Yes.

Q. If a Ford car were to drive into a service station among the 13 percent stocking AC exclusively, the situation would be similar; is that correct? A. Yes, sir.

Q. And in 2 percent of these situations, an Autolite brand spark plug would be sold, regardless of what automobile drove in, normally? A. Yes, sir.

Q. Now, taking the converse of this 41 percent figure, is it true that 59 percent of the service stations referred to here do not stock the Autolite brand at all? A. That is true, sir.

Mr. Shapiro: I would like to have marked F-39, for identification, your Honor.

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[1574] Q. (By Mr. Shapiro) Now, Mr. Hodges, am I correct in stating that F-39 for identification concerns only the 41 percent that stock Autolite as represented on F-38? A. Yes, sir.

Q. Now, would you explain what this tabulation purports [1575] to show? A. This shows that of the metropolitan service station operators that stock Autolite plugs, the frequency with which they stock other brands as well and the frequency with which they stock only the Autolite brand.

Q. So that this information, then, is derived from the same information, the same type of information, as F-38; is that correct? A. Yes, sir. It is a tabulation taken from the other tabulation.

Mr. Shapiro: I offer it in evidence, your Honor.

Mr. McManus: We make the same objection to this as we did to the last table, your Honor.

The Court: All right. Objection overruled and the exhibit received.

Q. (By Mr. Shapiro) Now, Mr. Hodges, with respect to F-39, looking at the first line that says "Autolite plus AC and Champion Only", what does that mean in terms of stocking? A. This means that these particular stations, or 72 percent of the metropolitan area gasoline stations, stock all three major equipment brands.

Q. You mean 72 percent of the ones that stock Autolite? [1576] A. That is right. Excuse me.

Q. Carry all three of the major brands; is that correct? A. That's correct.

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[1635] Q. Now, how do you account for the increasing level of sales of Autolite spark plugs during the years 1964 and '65 and '66 [as shown in Ex. F-49]? A. Well, normally, because of the original equipment replacement practice in the industry, and because of the sharply higher number of new unit installations because of the fact that Autolite is now original equipment on Ford Motor Company products rather than Chrysler and [1636] American Motors products. There is a lag in the time it takes for these units to reach the road and to reach the point where replacements will be made.

During the first two or three years of the vehicle's life, many of the replacements will be made in the dealerships of the franchised new car dealers during the warranty period. And we normally think of these cars as reaching the full maturity of the potential, as far as gasoline service stations or service repair shops or chain stores, for that matter, that are normally serviced by this warehouse distributor type of distribution system, to be approximately two and a half to three years.

So that this represents the 1962 to '63 cars coming into this market for the first time, and we would expect it to grow rapidly from this point on.

Q. Now, apart from the fact that the first generation of Ford cars are taking, you say, two or three years to get into the non-dealer after-market for repairs, is there any conclusion to be drawn from the fact that the overall population of original equipment Autolite spark plug cars is

increasing each year? A. Oh, yes. It reflects the exchange of the Autolite brand for the Champion brand on Ford vehicles, which means a rapidly growing share of the population. It will take [1637] six to eight years for our population share of units in operation to match our original equipment share. So it will still be growing, as I recall, through 1972.

Q. Would you explain what you mean when you say "units in operation"? What does that term refer to? A. This is the number of cars and trucks on the road that are still operating, that are licensed. Each year cars must be registered in each state, and if they are scrapped or are no longer to be used they are not re-registered. So that each year there is some loss of the prior years' cars that entail accidental—or entail an accident or something like that involved. So this is the number of units that are still operating on the road each year, and we expect our share of that that is equipped—that was originally equipped with Autolite spark plugs to be rising rather rapidly. And it has been.

[1638] Q. And the reason for that expected rise is that each year there are more cars on the road than there were the year before originally equipped with Autolite spark plugs; is that correct? A. That's right, sir.

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[1686] Q. Would you explain what it [Ex. F-61] shows. A. This shows the total replacement sales of Autolite spark plugs for the years 1956 through 1965, broken between our estimate of original equipment replacements and all other replacements. The original equipment replacements are based on a part number by part number analysis of our sales. The [1687] all other is the residual. We have some, as I recall, 134 or 135 part numbers in our spark plug line,

and we know what cars they're designed to fit, what applications they serve; and by analyzing our sales results, we can tell which ones are being sold for replacement on original equipment vehicles, which would include the pre-1961 Chrysler-American Motors vehicles with the post-period Ford Motor Company vehicles which carried the Autolite as the original equipment brand.

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Q. (By Mr. Shapiro) Now, Mr. Hodges, would you state once again what the ratio is between the 59 percent and the 41 percent, the 60 percent and the 40 percent, and the 60 percent and the 40 percent here? 'A. This is the ratio of original equipment replacement to all other replacements within our total replacement sales, and it tells us that prior to the acquisition approximately six out of ten Autolite replacement sales had been for original equipment replacements, that the five years following the acquisition approximately 60 percent of Autolite replacement sales then in Ford hands [1688] represented original equipment replacement, and over the ten year period it has averaged 60 percent. It has risen slightly in the last two years to 69 percent versus 60 percent. But in general we view an original equipment spark plug sale, replacement sale, as generating an additional two-thirds of one plug in non-original equipment replacement sales.

Q. Two-thirds of one plug per original equipment plug? A. For each one plug, original equipment replacement.

Q. And the other third of a plug would be for non-original equipment replacement; is that correct? A. No.

Q. I am sorry. A. One plug original equipment replacement sale would generate an additional two-thirds of one plug. It is a 60-40 relationship.

Q. I see. Well, now, is there any relationship between the 41 percent figure here and the 40 percent figure here with original equipment status? A. Absolutely. We have shown earlier the stocking position at the retail level controls very largely your chances of getting non-original equipment replacement business, and, to some extent, original equipment replacement business. The means of becoming stocked in [1689] the retail level is original equipment status. Those that have original equipment status on a significant number of vehicles, General Motors products, Ford products, Chrysler products—that many of these gas stations or service garages will feel they have to stock your product and this gets your product on the shelf.

To the extent that you are alone or to the extent that you are dual with one other line, you then share the non-original equipment business that is done. Even if you are there with all or both the other lines, so that all domestic vehicles are covered, you still get your share because your stock of the foreign car replacement, for example, or some of the other applications that come in.

So that non-original equipment replacement is based on stocking which, in turn, is based on original equipment status.

Q. Does this go back to the testimony you gave earlier that if Autolite, for example, is stocked all by itself then any car driving into that service station is likely to get an Autolite spark plug whether it is originally equipped with Autolite or not? A. That's correct.

Q. And if it is stocked with AC, then it has a chance of getting Chrysler business on post-1961 Chrysler models; [1690] is that correct? A. That is correct.

Q. So that where the Autolite spark plug is on the shelf, you get not only original equipment business but you also

get non-original equipment business? A. That's right. Again depending upon stocking.

Q. Yes. A. Usually.

Q. Now, in order to be stocked, however, in the large preponderance of the retail outlets, you need original equipment status on a major vehicle; is that right? A. That's correct.

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[1827] A. Well, basically, we know that for every plug that is installed as original equipment that it will eventually be replaced approximately six times during the life of the vehicle. Our data indicates that roughly half of the time it will be replaced with the original equipment plug, either due to stocking practices or due to particular pricing problems and things of that kind. About half the time we will achieve OE replacement when the plug is replaced.

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Testimony of Irving A. Duffy, Until 1966, Group Vice President, Director and Member of the Executive Committee, Ford Motor Company

DIRECT EXAMINATION

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[1985] Q. Now, was any component of Ford Motor Company added to those things under your jurisdiction on April 12, 1961? A. Yes.

The Court: What was the question?

Mr. Shapiro: Whether a component of Ford Motor Company, your Honor, was added to Mr. Duffy's other responsibilities.

The Court: All right.

A. Yes.

Mr. Shapiro: On April 12, 1961.

A. Yes. The Motorcraft Division.

The Court: The what?

A. The Motorcraft.

The Court: The Motorcraft Division?

A. Yes.

Q. (By Mr. Shapiro) And what did the Motorcraft Division consist of at that time, in terms of personnel? [1986] A. Oh, it was a very small organization that was transferred from the Ford Division, and had been engaged in the marketing of—or in the after-marketing. I believe it was thirty to forty people.

Q. Did it also, from that date forward, include personnel which had formerly been employed by The Electric Autolite Company? A. Yes. As the personnel was transferred from The Electric Autolite Company they transferred into

the Motorcraft Division generally, or into the Hardware & Accessories Division, from the manufacturing operations.

Q. On August 14, 1961, was the Motorcraft Division's name changed? A. Yes, it was.

Q. What change took place? A. To the Autolite Divison.

Q. Now, on January 14, 1965, was the General Products Group redesignated the Tractor-Autolite-Philco Group? A. Right.

Q. And did you, from January 14, 1965, forward continue to have jurisdiction over the Autolite Division? A. Yes, I did.

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[1995] Q. Prior to April 1961, Mr. Duffy, had Ford Motor Company given any consideration to whether or not to integrate the manufacture of spark plugs? A. Yes, it had.

Q. Did it consider it once or more than once? A. It considered it several times.

Q. Did Ford Motor Company reach any conclusion or decision as to whether or not to integrate prior to April 1961? A. Yes.

Q. What was that decision? A. In the negative. It would not integrate—manufacture spark plugs.

Q. What were the reasons that Ford Motor Company decided or concluded not to manufacture spark plugs? A. Well, they were primarily economic. In the first place, Ford Motor Company was and had been over an extended period of years purchasing the spark plugs which it needed as original equipment on its automobiles at a price which was [1996] a fraction of the cost of the production of a spark plug; and, of course, that's a very, very important reason.

There were other reasons involved in the decision not to go to the manufacture of spark plugs, and that is that Ford

did not have a basis for an expected high volume of replacement spark plugs except after an extended period of time, because the car population at that time had as original equipment spark plugs, of course, the Champion plug, and if it produced a spark plug which would be used as original equipment, a substantial number of years would have to pass before the volume would equal the volume that at that particular moment Champion enjoyed as original equipment on our spark plugs.

But getting back to the—and, of course, that's an economic consideration. But getting back to the manufacture, first of all Ford Motor Company did not have spark plug engineers, design engineers, and it did not have spark plug designs. It would have meant the development of designs of spark plugs which were adequate for the full range of our use. It would have had to spend the time and the money to study and develop the most efficient methods of producing spark plugs. We were not skilled in the type of ceramics which are required to go into spark plugs.

These times were not completely overlapping because, as a matter of fact, it would be necessary to take [1997] the spark plugs thus designed and thus developed and tailor them to the whole line of engines, because each engine has characteristics which call for really the art of tailoring the spark plug to the particular car; but the spark plug that is tailored to the particular car, we would have to be sure that it came off of a production run of spark plugs.

So taking that all in all, the time at which sufficient volume would come along to take care of the costs that would be involved in the meantime made it look unattractive, in view of the fact that we were getting spark plugs from Champion at that kind of a price.

Q. At the six-cent price? A. At the six-cent price—roughly six cents.

Q. Now, Mr. Duffy, were you in 1966 a member of a committee called the Integration Committee? A. I was.

Q. Could you describe generally in functional terms the Integration Committee. A. Yes. In functional terms, the Integration Committee was a committee of the Ford Motor Company that cut across staff and division lines. Its purpose was to stimulate and make recommendations with respect to the potential items to integrate into Ford Motor Company, Ford Motor Company looking always for opportunities to improve its profit; and I was a member of that committee.

[1998] Q. Was that a decision-making committee—

The Court: (interposing) How many were on it, do you remember?

A. I can't remember at this particular time, your Honor, but I think there were probably 8 or 10 members of this committee.

Q. Did the Integration Committee make decisions, or what did the Integration Committee do? A. No, it did not make decisions with respect to integration. It made decisions with respect to the pursuit of studies looking towards integration, yes.

Q. Well, after the Integration Committee had made a study, did it sometimes make a recommendation? A. Oh, yes, it would make a recommendation.

Q. And to whom might it make such a recommendation? A. Well, it might make a recommendation to one of the Group Vice-Presidents or even directly to the general manager of one of the divisions, looking toward a more detailed study of the particular product in all its aspects to determine whether or not the division, having the responsibility, of course, for profitable operation of his division, whether or not he could expect to produce a profit.

Q. Did the Integration Committee make recommendations to the Executive Committee? [1999] A. Yes. The Integration Committee from time to time make recommendations to the Executive Committee.

Q. Did the Integration Committee make recommendations to the Board? A. Yes, to the Board. Generally speaking,—excuse me, so I can clarify that,—generally speaking, where recommendations were to be made to the Board, there was an intermediate step of the Operating Policy Committee or the Executive Committee or the Administrative Committee—Administration Committee, depending on what particular era was involved.

The Court: Would the Board eventually have to either approve or disapprove the recommendation?

A. Yes, sir; yes, sir, in most of these cases.

Q. Mr. Dufly, I show you a document which has been marked G-3, and ask you to study the handwritten note on the upper right hand corner. You need not read it out loud but just read it to yourself.

Do you recognize the handwriting Mr. Duffy?

A. I do not.

Q. The first words are: Integration Committee approval, 10/12/60. Based on your knowledge of the circumstances at the time and your membership on the Integration Committee, what do you understand that note to mean?

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[2000] A. Well, I would say that the Integration Committee approval referred to here was the approval for someone to carry out studies, detailed studies, on the subject matter of this particular paper.

Q. It says, "Mr. Duffy to carry out program." A. Yes.

Q. What do you understand that to mean or did you understand that to mean? A. Well, I understand that I had the responsibility of carrying out the program I just described and that was the study program.

Q. Now, the second note is: "Duffy H & A started with a list of people to approach." What do you understand that to mean? A. Well, as I understand—may I just make an explanation here, very simply, that it isn't Duffy who would carry out the program but one of Duffy's divisions would carry out any program or study, and that would be the H & A Division under the circumstances of this, the spark plug and batteries; and that means that, as I have already stated in my testimony, that we did not have personnel skilled in either battery production or spark plug production; and, of course, before any study could be made, we would have to have people who know enough about manufacturing, the design, etc., of spark plugs, so that [2001] we could make a study that had some significance.

Q. Now, the next line reads: Told to wait pending Mars. Do you understand what that means? A. Well, I think, just what it says, to wait pending Mars—excuse me, the word "Mars" refers to a study that was under way with respect to a certain acquisition of the Electric Autolite Company.

Q. In other words, Mars was a code name—A. Code name.

Q. —for Electric Autolite Company; is that right? A. Yes, in one phase.

Q. Yes. Now, Mr. Duffy, you mentioned a difference between staff and some other aspect of Ford inter-organizational grouping, what was the opposite of staff? A. Line.

Q. Line. Now, was this a staff report or a line report? A. This was definitely a staff report.

Q. Who, again, was Mr. Beck? A. Mr. Beck was the manager of the Business Development Office of the Finance Staff of Ford Motor Company.

Q. Now, on the third page of this report, it says: Prepared by: A. Alic. Now, who was A. Alic? A. Mr. Alic was one of the—I believe at that time he was Assistant to Mr. Beck, but he was one of his men on the Finance Staff, Tony Alic, Anthony Alic.

[2002] Q. Now Mr. Duffy, did the document that I have handed you, G-3, contain sufficient information upon which a decision could be made as to whether or not to integrate spark plugs as far as Ford Motor Company was concerned? A. No.

Q. Would you explain what considerations would have to be considered that are not covered in this document, going to the questions of whether such a decision could be made? A. Well, as I previously stated when you asked me with respect to integration of spark plug considerations, the same considerations would have to be gone through with respect to spark plugs by an organization that knew it was going to have the responsibility for the production and marketing of those spark plugs.

Q. Well, what considerations would be taken into account in determining whether or not to integrate that are not covered sufficiently in this document? A. Oh, all of the time factors which I have mentioned, and that is the cost, the cost and the time involved in securing for, in this case the Hardware and Accessories Division, an adequate engineering staff to design a new spark plug, then to undertake facility studies—where would they be produced, where were there facilities, were there facilities available, but

were the facilities, if [2003] available, planned for some other purposes and were they suited to the efficient production of spark plugs, because you would have—we could not go into it unless you could expect to be at least up to, if not beyond, the current state of the manufacturing art.

We would need to spend the time and money in our manufacturing engineering men and in our manufacturing —with the assistance of the manufacturing staff, to determine processes. We would have to learn the sources for and the most efficient and latest methods of manufacturing the ceramics; and then the question of, on a high-volume, small item of this kind, the design of machines—this is not a broad industry—and so you would have to design machines to produce these at a high volume on a very efficient basis; and factors that fall into that category; and all of that is costly and it is time-consuming.

Then, of course, the division general manager having the responsibility for, as in H & A, he would have to assure himself that—of the factors I have previously described with respect to the markets that would be available and the time fact periods in which they would evolve and the costs that would be involved.

Q. Now, were studies ever carried out sufficient to obtain information on the various factors you have mentioned [2004] sufficient, again, to determine whether or not to integrate the manufacture of spark plugs? A. They were not carried out in the detail I have described.

Q. Now, Mr. Duffy, if the Electric Autolite acquisition had not taken place, would Ford Motor Company, in your view, have integrated the manufacture of spark plugs? A. In my opinion, Ford Motor Company would not have integrated the manufacture of spark plugs.

Q. Would you state the reason, please? A. Well, for all of the reasons which I have stated, which would have extended the loss and the investment over a long period of time; but, I think, most important of all, I don't think that the Championship Company—Champion Spark Plug Company, would have stood still for this.

Q. Well, what could they have done? A. Well, they could do a lot of things. They could handle their—deal with the price, the price of original equipment; they could deal with the price and terms of their replacement spark plug, because they were our traditional producers over a long period of time; and such action, in view of the fact that the Engine and Foundry Division, which would purchase this spark plug, would knock the studies made into a cocked hat because of the difference then in the transfer price offered.

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Deposition of Charles E. Beck, President and Chief Executive Officer of American Bosch Arma Corporation; President and Chief Executive Officer of Philco Corporation 1961-64; Director of Business Planning Office of Ford Motor Company 1958-1961

DIRECT EXAMINATION

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[2015] "Q. During the time that you were director of the Office of Business Planning, did you develop, or had you developed, a philosophy or approach to the parts situation in the after-market? [2016] A. Yes.

"Q. Would you explain what that was? A. Well, number one, after making a very comprehensive study of the replacement parts business, and the Ford Motor Company participation, we concluded that, number one, the customers of Ford products were choosing sources of supply other than the authorized dealers, and I felt that the customers were entitled to buy Ford quality engineered specification parts at any source they choose to patronize, and that we had an obligation as a company to provide those parts in channels other than through the authorized dealers.

"Secondly, it was a business that I felt should be profitable to the company, and should not only enhance its replacement business, but would enhance its new car sales because you would get improved service to a wide spectrum of customers.

"Q. Your feeling then was that it was the Ford part that you wanted to get into the after-market through channels other than the dealers; is that the idea? A. Yes.

[2017] "Q. Now, in connection with this viewpoint that you have just testified about, did you take any steps as

director of the Business Planning Office? A. Yes. We looked at many alternatives. We looked at a large number of companies—I mean the typical analytical look. The culmination of those studies resulted in a detailed look at Electric Autolite Company."

Mr. Shapiro: Under the stipulation, your Honor, I should like to have marked as F-73, in evidence, a document entitled, "O'Leary Corporation Field Trip, 6/13/59," which was marked Beck No. 1 on the deposition.

(Document marked by the Reporter.)

Mr. McManus: We have no objection, your Honor.

The Court: It is received.

(The reading of the deposition continues:)

"Q. I show you a document which has numbers on it, 3892 through 3897, entitled 'O'Leary Corporation Field Trip, 6/13/59', and ask you if you can identify that? A. Yes.

"Q. What is that document, sir? A. This is a record for the file of the field trip [2018] by Mr. John Randall and myself, at which time we made a trip through various facilities of the Electric Autolite Company, then called for code name purposes, 'The O'Leary Corporation', at which time also we met a number of their executives."

Mr. Shapiro: Your Honor, I leave off at line 22 of page 6 and recommence at line 5 on page 7.

The Court: Just a moment, please. Code name O'Leary? I thought it was another name,—

Mr. Shapiro: Mars, your Honor.

The Court: Mars.

Mr. Shapiro: They used both.

The Court: Oh, they did.

Mr. Shapiro: At first it was O'Leary and then it became Mars.

* * * * *

"Q. At the time of the visit that is referred to in F-73, what plants actually were seen by you and Mr. Randall? A. Well, we went to the general offices in Toledo. [2019] They had two plants—three plants in the general Toledo area, along with an R & D building and a parts depot.

"Q. What were the products that were manufactured in the plants in Toledo, do you recall? A. Yes; primarily electrical items, OEM and service parts, both.

"Q. From your examination of those plants, were you satisfied with the facilities as being good facilities? A. They were in very poor condition.

"The buildings were, except for this so-called Northwest Plant, which was only partially occupied, as I recall—but the facilities that they were using for production were, perhaps, absolutely antiquated. Much of the equipment was also extremely antiquated.

"Q. In the General Conclusion section on Page 5 of the memorandum, you say, 'With the decline in the electrical products business due to the termination of Chrysler business, we would estimate that the company would probably regroup its remaining facilities in one building.'

"What did you mean by this 'decline in [2020] business' that you mention there? A. Well, we were aware that Chrysler had decided to integrate their electrical items, and that Autolite would be left with a much reduced volume than they had previously enjoyed, and it was our observation that, number one, they couldn't possibly keep that

Toledo facility going, to say nothing of their labor problems which I was aware of.

"They had just an unbelievable labor situation, and with the volume of business as we estimated it, they, of necessity, would have to regroup to some much smaller location, because, as we saw it, the only business they would have would be a certain amount of residual after-market, and how long they would stay in that was questionable.

"I didn't know whether they would have enough volume to tool. They obviously could produce the parts that were now tooled, but succeeding model parts there was a question in my mind whether they would stay in business and at best they would have to regroup.

"Q. I take it then that your interest in the Electric Autolite Company at that point was not in [2021] connection with the electrical parts aspects? A. No.

"Q. What, if any, aspect of the business did you consider to be worth further looking into, if you did? A. Well, we felt that the spark plug business warranted further investigation, and the battery business.

"Q. Did you make such further investigation? A. Yes.

"Q. Did you at any time conclude that it would be worth negotiating? A. Yes, we felt that it was worth at least some exploratory negotiations.

"Q. Did you discuss this with some of your colleagues at Ford Motor Company? A. Yes, I discussed this with my then immediate boss, who was Mr. Lundy. I discussed it with Arjay Miller, who at that time was Controller, and on, I believe, one or two occasions in very general terms I discussed it with Mr. Ford; more on terms of the status report.

"He wanted to know what was going on, and we gave him just a general status report.

Charles E. Beck—Direct Examination

"Q. Did you eventually have a meeting with the Electric [2021-A] Autolite people? A. Yes.

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[2022] "Q. Do you remember the date of that?"

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A. It was in April or May of 1960. Duffy and I went down and had our first meeting with him.

"Q. Does the date May 25, 1960 ring a bell with you? A. It could be, but honestly I couldn't identify the exact date. It was in that time period.

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"Q. Now, you said in April or May—you weren't sure—of 1960, you and Mr. Duffy met with Mr. Wattles and Mr. Davies; is that correct? A. That is correct.

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[2032] "Q. Now, following your conversation with Bob Davies did you consider any other way or ways of reaching the after-market along the lines that you had been thinking besides the acquisition of the Electric Autolite Company? A. Yes, as I recall, we made a study to determine, (1) the investment and (2), and most importantly, the capabilities required if we went into this business, start from scratch.

"Q. I show you a memorandum dated September 13, 1960, which consists of three pages purportedly with your approval or participation, prepared by A. Alic. A. Yes.

"Q. And an Exhibit 1 and an Exhibit 2 to the memorandum. And I ask whether you can identify it. A. Yes, this letter was prepared—was prepared by Mr. Alic for my signature. I remember it.

"Q. Did you read it and approve it before it was—A. Yes.

"Q. —completed? A. Yes."

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[2033] "Q. Mr. Beck, would you look at G-3 and see if you can state what your recommendation was as embodied in this memorandum?

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A. Well, conclusion No. 1 that a spark plug operation should be profitable, if only the present Ford requirements were produced. Its profitability would be greatly enhanced, however, if the company participated in the replacement market other than the parts and accessories.

"Two, that a battery operation would be very marginal and our recommendation was that Ford establish a spark plug manufacturing operation with the capacity to produce 52,000,000 plugs annually on a two-shift basis, and we recruit the necessary people [2034] and that we make a detailed plant study and we not move on a battery operation until such time as replacement sales, that is other than P & A, and improved profits therefrom, would warrant such action."

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"Q. There is a little note in handwriting up at the top. It says, 'Integration Committee approval, 10/12/60, same meeting as carburetors, Mr. Duffy to carry out program."

"Does that mean that this was a final decision, or was there further approval that would be necessary before actual work would commence? A. The Integration Committee was an in-house committee whose function was to recommend programs. It did not have an approval authority.

"All programs, such as this, would require approval of the Executive Committee—in this case would probably require approval of the Board of Directors.

"It was an internal working committee.

"Q. Now, there is a second note here saying, 'Duffy H & A, started with'—can you read this note? [2034-A] A. Let me see it.

"It is difficult to read. I would interpret this, however, as saying that Duffy in H & A Division were to take a look at the personnel or people requirement, and that I would guess this also would mean that they were to visit potential sources of acquiring people.

[2035] "Q. Told to wait pending Mars? A. Yes.

"Q. Is that— A. I would say that that meant that they were to prepare themselves to do this, but were not to go out and make these trips until the—there must have been some planned meeting with the Mars people.

"Q. At that time? A. At that time.

"Q. I suppose the negotiations weren't completely dead at that point, that you were still thinking about it. A. During this time period, occasionally Mr. Davies would call. We had a very friendly relationship, among other things. And he would call me once in a while and say, 'Are you still interested, Charlie?'

"And that was really the tone of the call. I said, 'Well, not at this time.'

"Q. I suppose you still had it in the back of your mind that some deal might be appealing but so far you hadn't heard it; is that about right? A. My answer to him was that we have a latent interest, but we are not interested in pursuing the deal as [2036] laid out by Mr. Wattles. 'Now, if you can come up with something else we will talk to you about it.'

"Q. Well, did there come a time when Mr. Davies did come up with something else? A. Yes. As I recall, he broached the subject on the basis, 'Would you be interested

if we were to sell only the spark plug and a portion of the battery, all or a portion of the battery operation?'

"As I recall, my answer was, 'we can take a look at it.'

"Q. Do you recall when that negotiation recommenced? A. No. I would guess it is sometime around the end of the year.

"Q. The end of 1960 or the beginning of 1961? A. Yes, somewhere in that time range."

* * * * *

[2037] "Q. Would you explain about that meeting? A. Well, this meeting was held in Toledo with Messrs. Wattles, Davies, E. D. Stroh. And at this meeting, they indicated that they would be willing to sell [2038] to Ford spark plug operation at Fostoria, Ohio, all the battery plants located in the U. S. and Canada, and the Autolite trade name for use on spark plugs and batteries in the United States. And that they would exclude the Brazilian subsidiaries, as I recall they had them.

"That Electric Autolite would retain their corporate name, but would merchandise the electrical items under some other trade name, such as Prestolite or—they had two or three of them, as I recall.

"And that they would—Electric Autolite would continue to supply the electrical items to their present customers, both OEM and replacement, for the next two to three years, but would probably phase out of business because even they and we at that time didn't think they would stay alive. They didn't know.

(pause)

"And that we would obtain the management and the organization related to the above. We also discussed that Ford would source to Electric Autolite certain electrical

items, and this was done primarily to give them some volume, to give them a fair chance to determine whether they could [2038A] stay in business. And from a mechanic's standpoint, they indicated that such a sale would not require stockholders' approval because it constituted a small percent of their total assets.

[2039] "Q. Mr. Beck, I believe you said that the proposal indicated that the Ford Motor Company would use the trademark on spark plugs and batteries; is that correct? A. Yes.

"Q. And I believe you also stated that the Electric Autolite Company would retain its corporate name which would include Autolite, and would merchandise electrical items under some other trade name; is that correct? A. That's right.

"Q. Now, there is no provision in here anywhere for the merchandising of electrical parts under the Autolite trademark by anybody.

"Can you explain why that doesn't appear anywhere? A. Well, number one, we had many questions in terms of the feasibility and profitability of our distributing a broad base of electrical parts.

"At that point in time I recall the General Motors program was just beginning to start, and we had reservations as to the terms of its success, and because of the questions we had, we assigned a very low priority—in fact, we didn't give much consideration to that. [2040] That's why it is not in there.

"Q. You weren't thinking at all about electrical parts using the Autolite name at that time? A. No, we didn't—if we had any thoughts, they were fleeting ones. Because I didn't think that you would have an economy scale to tool these parts. That was my first question. I didn't assign much value to it.

"Q. Did you have a program at that time for the sale of electrical parts in the after-market? A. We had the Motor Craft program, which was not very successful, I might add.

"Q. But at this point in the negotiations were you considering that the Motor Craft program would be an ongoing program? A. Yes, as far as we knew, yes.

"Q. And you were using the Motor Craft trademark, were you not? A. Yes.

"Q. So that you weren't contemplating at that time using the Autolite trademark in connection with your electrical parts sales in the after-market; is that correct? A. No.

"Q. As far as manufacturing facilities were concern- [2041] ed, you were not purchasing manufacturing facilities, as I read this memorandum; or, at least the proposal was that you would not be purchasing electrical parts manufacturing facilities. Is that correct? A. No, that is correct.

"Q. How were you distributing your parts in the Motor Craft program; what was your— A. We were going through the AEA, the same distribution as Autolite had.

"Q. In other words, you were already marketing your replacement parts through the AEA— A. Yes.

"Q. —central warehouse system; is that correct? A. Yes; right.

"Q. And did you have arrangements with these central warehouses to stock your parts? A. That's right.

"Q. And you say this was the same system that the Electric Autolite Company was using? A. To my knowledge, yes."

The Court: Just a minute. All right.

"Q. Had the Autolite trademark, at the time of these negotiations, been associated in any way in the after-market with Ford parts as distinguished [2042] from other appli-

cation parts, talking about electrical service parts now?

"In other words, had there been in the after-market any marketing of Ford application parts under the trademark Autolite in any substantial amount? A. Not to my knowledge.

"Q. What was the principal use of the Autolite trademark in connection with service parts in the after-market, if you know? A. Well, I think it was primarily associated with spark plugs.

"Q. And as far as— A. And secondly to batteries and as far as electrical parts, other than the fact that they had been historically an OEM supplier of Chrysler, I am sure they had some identification with Chrysler. But not with us, or the market in general, as I saw it.

"Q. You mentioned that this Paragraph 3, talking about that Electric Autolite would 'probably phase out' of the business on a gradual basis.

"Was this something that was contemplated or guessed at, or was it to be part of any agreement as far as you— [2043] A. Well, it was—it was guessed at. It was not part of an agreement. Because, as I recall, at that time, they were either just building that Decatur plant or were planning to build the Decatur plant, and they were hopeful that being in a smaller plant, and having a more favorable labor situation, both rate-wise, in terms of the seniority and all the problems they had, they thought that they could make a go of it.

"But they weren't convinced, and neither were we. Primarily it is the tooling that was our big question; it is theirs. That's why this note I put down, they didn't think they could stay alive."

The Court: Just a minute. All right.

"Q. Mr. Beck, you mentioned that General Motors had just begun an extended line program; is that correct? A. Yes.

"Q. Do you recall the year in which they started that? A. Well, I would say they started that in about 1959, to the best of my knowledge.

"Q. And you say that the question was open as to whether it would succeed or fail.

[2044] "Was that your testimony?

A. Yes.

"Q. Did you have any conclusion of your own as to whether they would succeed, or whether they could succeed? A. Well, my personal views were that they had a better chance of succeeding than anyone else because of their—the car population.

"Secondly, I have nothing but the greatest respect for their management ability, and I didn't think they would start in on a program that they didn't think they could succeed with, and usually they do. They have a much bigger base, their economy scale, they could reach it soon.

"Q. What do you mean by 'car population' as affects this question? A. Cars on the road. In other words, there are more General Motors cars on the road than any other make. And I think that General Motors have a superior reputation in every endeavor, the fact that it has the United Delco label on it, which was their program, I think had considerable merchandising value.

"Q. Did you know the degree to which General Motors [2045] may have been integrated in its manufacture of extended line electrical parts at that time? A. We didn't know, from the sources of intelligence that we could come up; it appeared to us that they were going to launch a rather substantial campaign, an all-car line make.

"Secondly, we knew to be successful they had to move pretty fast. And how successful they were, we couldn't tell, of course. But our guesses were that they would make some progress.

"Q. What I asked, though, is whether you knew whether they integrated or the degree to which they were integrated. A. No, I did not know. We guessed to the extent they were integrated. We heard from distributors and so forth, that they were going across the board.

"Q. You mean going across the board integrationwise? A. Yes; in terms that they were making in-house electrical items that would fit Ford, Chrysler and their full line of cars.

"I don't know about American Motors."

The Court: Just a minute. All right.

"Q. What was Ford Motor Company's status in terms [2046] of integration at that time, on parts other than Ford applications? A. Almost nil.

"Q. Well, how was it in connection with Ford applications? What percentage do you think there was? A. Well, you are talking about electrical parts now?

"Q. Yes. A. We were heavily integrated on electrical parts at that time. I would say it is tough to give you a percentage, but except for heavy trucks, and what we call 'low volume application', we were fully integrated on our volume items.

"Q. On your volume items? A. Yes.

"Q. But not at all integrated on non-Ford applications? A. No. I don't think we needed any tooling at that time, as I recall.

"Q. Did you consider that it would be economic to sell non-Ford application parts, as to which you were not in-

tegrated but had to buy outside? A. On a long-term basis the answer is absolutely 'no'.

[2047] "Q. And was that your conclusion at that time? A. Yes, it was."

* * * * *

[2058] "Q. What I mean is: How did the battery plant fit in with the price and various other terms of the transaction? A. Well, from a matter of businessmen's standpoint, it was clearly evident at this stage of the game that for us to acquire this spark plug plant it was going to cost us $20 million premium.

"And it also was clear at this stage of the negotiations that I could get a battery plant at book value. And obviously I was out to make the best deal possible for the Ford Motor Company, and I felt that it was a good deal, frankly, to be able to acquire one battery plant at net book value.

"Q. And you say that to acquire the spark plug plant, alone, it would cost you $20 million? A. Yes. That was absolutely clear to me at that time.

"Q. Suppose you were to acquire the battery plant without the Autolite name; did you consider doing that? A. No; because the Autolite name was an integral—was considered a value, particularly in the spark plug operation.

[2059] "Q. Did you seek to purchase the spark plug operation without the name at any time in the course of negotiations? A. No; because we made it very clear that they would not sell the spark plug plant without the name.

"Q. You mean at a different price? A. Yes; at a different price, no. Because that was the one business where they had done a lot of promotional effort, and nowhere in the discussions do I recall that we had ever separated the name from the spark plug operation.

"Q. When you say they made it clear to you that they wouldn't sell one without the other, if you had said you

would give twenty million for the plant— A. We wouldn't have done it.

"Q. —they would have sold you the spark plug plant for $20 million? A. Well, we were also interested in the distribution organization.

"Q. Of the spark plugs? A. And that was all tied in— it was the Autolite distribution organization.

"Q. You say you got one battery plant at net book [2060] value and that was without paying any additional premium; is that correct?

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CROSS EXAMINATION

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[2062] "Q. I believe you testified on direct examination that you had recommended—correct me if I am not right— that perhaps Ford might go into the manufacture of spark plugs on their own? A. Yes. I recommended—we prepared the study, and the conclusions were that it would have been profitable.

"Q. You also made a study in regard to whether Ford should go into the manufacture of batteries on their own; is that correct? A. Yes, that was part of the study.

"Q. And during the course of the study on both spark plugs and batteries, were you convinced that Ford had the ability to manufacture these two products if they so desired? A. Yes.

"Q. You felt convinced that they either had the know-how or could acquire the know-how to produce [2063] spark plugs and batteries; is that right? A. Yes.

"Q. Would this be true also of the electrical service parts that Electric Autolite had been making? A. Even more so, because they made those parts actually.

"Q. They made them for their own cars? A. Yes.

"Q. I just wanted to get something else straight, if I could. You mentioned a couple of times that Electric Autolite was going to have difficulty staying in business? A. Yes.

"Q. Am I right in understanding that you were talking about the electrical service parts or the service parts— A. Yes.

"Q. —end of the business? A. Yes.

"Q. There was no question about their ability to stay in the battery and spark plug business, was there? A. Not in my judgment, no.

"Q. So that every time that you were talking about [2063A] their difficulty in staying in business, you were referring to business other than spark plugs and batteries? A. Right.

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[2068] "Q. Were these attempts by Ford Motor Company to get them to sell the facilities to Ford, or was this an attempt by Electric Autolite to get Ford to buy these facilities? A. The first inquiry was made by the Ford Motor Company and we turned down this whole package. Thereafter the initiative was on behalf of the Autolite Company to us.

"Q. In other words, the proposals were coming from Electric Autolite— A. Yes.

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[2071] "Q. When I was talking about the purchase parts agreement, as I understand the final purchase parts agreement that was entered into, it only applied to—or, at least principally applied to—spark plugs and batteries; is that correct? A. Yes, that is correct.

"Q. And the purpose of this agreement, I believe that is what you testified to, is so that Electric Autolite could go back into the manufacture of spark plugs on the one hand—A. Yes.

"Q. —and— A. And to continue profitably producing batteries.

"Q. I see.

[2072] "And this was initially suggested by them; is that correct? A. Yes.

"Q. Did you have discussion among Ford officials that this might be another factor which might be helpful in any anti-trust implications in regard to the purchase? A. I am sure it was a consideration in our many discussions. I can't recall speaking to the Executive Committee, or anyone like that, but I am sure it was a consideration in our office in this evaluation.

"Q. And, as I understand it, and I believe you testified this morning, that it was the feeling—at least your feeling—in the discussions that you had with other officials at Ford that the purchase of the whole Electric Autolite Company would present anti-trust problems; is that correct? A. Yes.

"Q. And I believe—and correct me if I am wrong—that you also were concerned that the purchase of the spark plug plant and all of the battery plants might present anti-trust problems; is that correct? A. Yes.

"Q. And is it true that the purchase of the spark plug plant and the battery plant—one battery plant—[2073] and the Electric Autolite name, and the distribution system, you felt that by limiting it to this you would not have run into anti-trust problems; is that correct? A. That is correct.

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[2076] "Q. In your studies that you made, or that you have seen, or had someone prepare while you were with

Ford, did you consider the possibility that Ford might expand its Motorcraft line and take on the sale of spark plugs and batteries? A. Yes.

"Q. And when I say 'spark plugs and batteries', this would include a fuller expansion of the replacement [2077] parts other than what Motorcraft was carrying at the time? A. Yes.

"Q. You did study this? A. Yes.

"Q. And what was your conclusion in regard to that study? A. Well, our study was the total after-market, much broader than just looking at the Motorcraft line per se.

"Our conclusions were—and I mentioned these in my earlier testimony—that we felt the Ford Motor Company owed it to its customers to provide Ford genuine parts, to whatever distribution channel they chose to patronize, and recognizing that an ever-increasing percent of this market was being serviced, the public was being serviced by the independent garages and filling stations, et cetera, the non-franchised dealer, we felt that we had to take steps to supply parts in that market.

"Q. You testified that you, of course, could have manufactured your own spark plugs and your own batteries? A. That's right.

[2078] "Q. And isn't it true that over a period of time you could have built up a sales organization to market these products? A. Over a period of time, yes, I think so.

"Q. So that one of the things that you were acquiring from Autolite, along with the name and whatever distribution facilities they had, was what might be called 'lead time'; is that correct? A. I think that is right, yes.

"Q. In other words, the Autolite acquisition, with the name and the distribution organization, helped you to get

into the market faster than if you built it yourself? A. Yes, sir.

"Q. But you believe that, in time, you could have gotten into this market anyway; is that correct? A. I think it would have been costly.

"Q. It would have been more costly and more time? A. But in time you could do it, absolutely.

"Q. And when you say 'you', you are talking about Ford Motor Company? A. I mean the Ford Motor Company, sure."

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REDIRECT EXAMINATION

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[2079] "Q. And do you have any idea what the approximate General Motors car population is in terms of percentage? Have you any idea? A. Well, all my thinking is pegged on recent share of the market.

"Q. Which would be what? A. Which is the market served by the replacements by and large.

"It is my judgment that General Motors should have something around 55 to 60 per cent, and Ford should have somewhere between 25 and 28 per cent.

"Q. What is the significance of that car population in terms of the sale of replacement parts? A. Twofold; number one, there is a tendency on behalf of the car owner to buy parts that are supplied by the company which manufactured that particular vehicle.

"And secondly, General Motors having a much broader integrated base of these types of items has, I think, a—by far a more recognized position [2080] in the after-market than does any company.

"Q. When you testified in connection with Mr. McManus' question about the possibility of Ford building up a sales organization that could do the job in the after-market, you were talking about the sale of Ford parts other than through franchise dealers of the after-market, were you not? A. Yes.

"Q. And when you testified about Ford could have gotten in, and so forth, you were referring to what you had earlier testified was your objective, which was to put Ford parts into the— A. That's right.

"Q. —into the garages and filling stations; is that right? A. Yes, sir.

"Q. You didn't even have that kind of sales organization through the Motor Craft Division in any completed form at that time? A. No, it was a—it was in very small—it was just the embryo of an organization, really, and when I say that you can do it, I believe you can do just that; whether you can economically justify doing it is quite another question. Because there you have to look at what your development costs are in terms [2081] of the organization, your market position and all, and that could be a long period of time.

"You can do it; with time and money you can do anything. Whether your would is another question.

"Q. So in response to Mr. McManus' questions, you were talking about Ford's innate physical ability of doing what he asked you about? A. Yes, that's right."

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RECROSS EXAMINATION

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[2084] "Q. I just wanted to see if I understood you correctly, and I am not too sure that I do at the present time.

"When we were talking about Ford expanding its Motor Craft line, wasn't their intention to expand the Motor Craft line outside of the Ford dealers? A. Yes, it was directed to serve outside of the Ford dealers.

"Q. So that when I asked you whether it wasn't possible, or hadn't they given consideration to expanding the Motor Craft line, or any other Ford type of line, outside of the dealers, and you had answered that it was possible although it might be expensive, it was possible—isn't that what we were talking about [2085] when I questioned you? A. You mean expanding outside of the franchised dealers?

"Q. Yes. A. Yes, that is exactly what I was talking about.

"Q. And if you hadn't bought Autolite, wasn't your answer that you could have made this expansion, time and money being available? A. Yes."

Deposition of James F. Faunce, General Manager, Home and Auto Supply Department, Firestone Tire and Rubber Company

DIRECT EXAMINATION

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[2097] "Q. Well, now, Mr. Faunce, what brand of spark plugs, what brands of spark plugs do you now carry and have in your catalog? A. We have AC and Autolite.

"Q. When did you first start using the Autolite spark plug, if you remember? A. We started using the Autolite spark plug in 1953.

"Q. And do you remember when you started using the AC spark plug? A. 1957.

"Q. You don't carry any other brand of spark plug right now; is that correct? A. We do not.

"Q. Did you at one time sell a Firestone spark plug? A. Yes, we did.

"Q. Did you manufacture it at any time yourself? A. Well, we started in the late twenties to try to develop a line of automotive Firestone-branded merchandise. Of course, spark plugs were a key item at that time and still are.

[2098] "So we started to—did a lot of work, in fact, in both development and testing and even development of new materials to produce a line of Firestone spark plugs. We made them here in Akron, I think, for some years and then finally the plant was transferred to Wyandotte. So, from the late twenties until 1964, we had a line of Firestone spark plugs.

"Q. During that period from the late twenties to 1964, then, you had a line of Firestone spark plugs. Do you know during what period you actually manufactured them yourselves? A. We manufactured them until 1947.

"Q. And thereafter you had them manufactured for you? A. By the Autolite Corporation, right.

"Q. By the Electric Autolite Company? A. Electric Autolite Company, that's right.

"Q. When you were making them yourselves, did you manufacture your own ceramics or manufacture the ceramics? A. No, they were purchased.

"Q. Do you remember who your supplier was, by any chance? A. Frenchtown Porcelain, Trenton, New Jersey."

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[2099] (Reading of deposition continued by Messrs. Shapiro and Hudnut:)

"Q. Is that General Battery and Ceramics? A. I do not know that.

"Q. I see. At that time it probably was not. But that's in Pennsylvania, is it? A. Trenton, New Jersey.

"Q. I'm sorry. Now, Mr. Faunce, you say you do not carry the Firestone spark plug any more.

"When did you stop supplying Firestone spark plugs to your franchised dealers and stores? A. We sold out the last remaining stock we had in early 1964.

"Q. When did you make the decision to drop the line? A. Well, now, we made that decision in early 1963, but it had been on our minds for some period of time and we were watching the movement very carefully.

"Q. Had it been on your mind for years or days or months? A. Oh, years.

[2100] "Q. Was this a decision that you made easily or was it a difficult decision for you? A. It was a difficult decision because we hesitate to give up any Firestone-branded item because any place you have that name on an automotive item, you get additional exposure and we

hope it rubs off on the customer and makes them think of Firestone tires.

"Q. Did you have a good quality spark plug? A. Excellent. In fact, I think we did a more than normal, careful job of developing a plug because we were putting the Firestone name on it, and around here we don't lightly put that name on anything that isn't of high quality.

"Q. That is a very well-known name in the automotive industry, is it not? A. We like to think so.

"Q. You have it on batteries, I understand. A. We do.

"Q. You have it on chemicals? A. That is true. Complete line of chemicals.

"Q. And, of course, on tires? A. That's right. Fan belts, radiator hose."

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[2101] (Questions read by Mr. McManus and answers read by Mr. Noble, as follows:)

"Q. Let me ask you, first, whether Firestone ever had a substantial share of the aftermarket? A. I can't give you the percentage of industry figures, but the volume was considerable and very acceptable to us for a number of years.

"Q. When did it cease being acceptable? A. Well,—

"Q. Let me ask you this: Was it acceptable from a retail standpoint? Were your retail sales satisfactory on your Firestone spark plugs? A. Retail sales varied considerably. If we put a great deal of effort on the Firestone line in its early stages, we would get considerable sales.

"We went so far as to develop what we called a polonium, p-o-l-o-n-i-u-m, I guess, electrode, which we advertised very extensively, and at that time our sales to customers shot up because we were interested in new products, talked it, displayed it, actively advertised it.

[2102] "Q. Do you remember when that was? A. I can tell you—maybe—well, I don't want to guess. I do not know.

"Q. Was it in the thirties or the forties or the fifties? Do you remember that? A. I would think it would be in the late thirties."

(Reading continues by Messrs. Shapiro and Hudnut, as follows:)

"Q. Well, now, let me ask you this: Apart from whether it was satisfactory to you, your sales of spark plugs, was it ever a substantial factor—was it ever a large share of the after-market? A. No. Never reached—it was infinitesimal as far as the aftermarket was concerned.

"Q. But for you it was satisfactory? A. A reasonable item.

"Q. All right. Now, did you supply the Government at all? A. For a number of years, particularly up until 19—early 1962—we had the Government contract for a number of years and, in fact, that's the reason or one of the reasons why we hung on so long as we did, because it represented a substantial part of our business.

"Without it we would probably not have been [2103] able to make production runs of any size, any economical size.

"Q. So when you say your sales of spark plugs were satisfactory to you, you mean your combination of Government sales plus your retail sales; is that correct? A. During the last number of years that is definitely true.

"Q. But during the last number of years, if you were to take out your Government sales, how would you evaluate your retail sales? A. Very poor.

"Q. Well, now, forgetting the Government side completely and talking only about the retail side, how do you

account for the fact that despite the fact that you had a good name and had a good spark plug you were not able to gain a substantial share of the aftermarket? A. This is one of those tough situations where there's a definite interest because of original equipment, because of heavy advertising, promotion on certain lines of merchandise, and when you get—we found that when you get a mechanic involved who is working on the customer's car and is evaluated by the grade or type of product he is putting on the [2104] car, he is very reluctant to take a chance on something that wasn't originally designed for the car.

"As I said, in certain periods when we'd make a big drive at considerable expense, we would pick up a few extra sales, but under normal circumstances the names that were well-known on original equipment, that the mechanic and the retail customer wanted sold—this is not true in all fields, but it was in this field.

"Q. Now, you say when you put in a certain amount of advertising, your sales picked up a little bit.

"Do you mean your sales became a major factor in the aftermarket? A. Oh, no, never.

"Q. It picked up a little bit but all within that infinitesimal share you were talking about? A. That's right. That is right.

"Q. Well now, what about your own company-owned stores? I take it that there they would stock your Firestone plug if you wanted them to; is that correct? A. That's right. They are supposed to stock whatever we carry. They don't buy from an outsider unless we give them approval to do so.

[2105] "Q. What about spark plugs? Did your spark plugs move through your stores? A. We had them in the stores. I wouldn't say they moved in very big quantities.

See, that was the only line at the time, before we handled the Autolite and AC, that they could handle, and in most cases where we were doing service work we found that they weren't putting in our plugs but, rather, going up and picking up other names locally and cross-referencing the sales and service ticket.

"Q. So you would say they were buying original equipment plugs elsewhere and selling them: is that right? A. That's true, in many cases.

"Q. And they weren't moving your Firestone plugs even though they had to stock them? A. That is true.

"Q. Now, what about the franchised dealers and the associate dealers; did they, as far as you know, did they also stock Firestone plugs, or did they— A. Well, some of them did in the beginning, but it gradually drifted off to a point where it was very—extremely low volume.

"Q. Well now, from your understanding of the after-[2106] market, Mr. Faunce, let me ask you a hypothetical question:

"If the Electric Autolite Company had, instead of selling its assets to the Ford Motor Company, had not done so, but had lost its original equipment status with respect to the Autolite plug, what do you think would have been the consequence to the Autolite plug in the after-market? A. Well, I'd think they'd have to add a lot of money and time and effort to even come close to maintaining any industry position because this is one field where it takes a lot of effort, if you want to stay in it, without original equipment business."

The Court: Just a moment, here.

[2107] "Q. Well, do you think it would have been economic for them to pour enough money in? A. If it were my money, I wouldn't have done so, but I wasn't involved.

"But I would think it would be rather uneconomical.

"Q. And if they didn't pour more money in, and as you say it would have been uneconomical to pour any more money in, what do you think would have happened? A. It would drift down to a place where your production runs would be so high and the sales so low, you would be out of the aftermarket.

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CROSS EXAMINATION

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[2147] "Q. And I think you testified—correct me if I am wrong—that one of the advantages of the Delco line was that General Motors had so many automobiles on the road. A. That's one of the advantages, true, because in this field—this is a field akin to spark plugs again, in my opinion. This is a case where anybody who's putting it on feels a little hesitant to put on something which wasn't designed particularly for the car.

"Now, I'm not saying, by the wildest stretch of the imagination, that somebody under some circumstances couldn't make a duplicate part or a spark plug that would be exactly designed for that car, but, in my experience of 35 years in this field, it's a little unlikely because when you get into that particular area, we normally try to cut down on the numbers involved. Therefore, we go to a wider range of products that the same part fits, which is not the same as original equipment.

"This is true in spark plugs and true on ignition parts."

Deposition of Harry J. Noznesky, President of General Battery & Ceramic Corporation

DIRECT EXAMINATION

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[2157] A. Well, our principal business is the manufacture of replacement batteries and spark plugs. We have other facets, if that is of interest.

"Q. I think that batteries and spark plugs will suffice for this purpose.

"Do you manufacture electrical service parts at all for automobiles? A. We do not.

"Q. Taking first the spark plugs, do you have a line of spark plugs which you merchandise under the Bowers trademark? A. Yes, we do.

"Q. Do you also manufacture and sell spark plugs under private trademarks? A. Yes, sir, we do.

"Q. Do you have any other trademark besides the Bowers trademark and the private label trademarks for your spark plugs?

The Court: What is that name—Bower?

Mr. Shapiro: Bowers, your Honor. B-o-w-e-r-s.

A. No, sir, we do not.

"Q. Taking your Bowers spark plugs, the Bowers trademark spark plug for a moment, do you have a full [2158] line of such spark plugs for American vehicles? A. Quite complete, and we state we have coverage for 95 per cent of the American vehicles made.

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"Q. With respect to these spark plugs which bear the [2159] Bowers trademark, what is your general method of distribution? A. Our general method of distribution is

through our own organization, at the dealer level primarily, direct sales to dealers, and direct sales to commercial or fleet accounts, trucking accounts.

"Q. Do you sell to jobbers? A. We do, but it is a very fractional part of the over-all business; under the Bowers brand name, that is.

[2160] "Q. As far as your private label spark plugs are concerned, who are your customers, generally speaking, just by category rather than by name? A. Oil companies, rubber companies, large major chain store accounts, automotive chain store accounts.

"Those are the big ones.

"Q. Department stores? A. Well, the discount automotive divisions of department stores.

"Q. Approximately how many spark plugs do you sell per year? A. Between eight and nine million.

"Q. Do you consider that your spark plugs are spark plugs of high quality? A. We do.

"Q. Do you consider that they are comparable in quality to Champion, Autolite and AC spark plugs? A. We do."

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"Q. Now, Mr. Noznesky, with respect to your Bowers-branded spark plug, have you made substantial penetration of the after-market in the United States? [2161] A. We have not.

"Q. Can you explain the reason that you have not? A. Well, basically, to pinpoint it, it is rather difficult to get by the garage mechanic, at whatever level he may be, whether it is car dealer or his own garage, and so on, because he is prone to use the spark plugs—the brands of spark plugs that came in the original equipment portion of the motor car.

"Q. And you do not have status as an original equipment supplier on any major vehicle, I take it. A. We do not.

"Q. Do you consider that status on a major vehicle for original equipment purposes in the spark plug field is essential for substantial penetration of the after-market? A. Yes, sir.

"Q. In your opinion, from your experience in the field, do you have any idea as to what would have happened if for some reason the Electric Autolite Company had found itself with no major original equipment status with the Autolite spark plug? A. Well, it would be my opinion that Autolite's popularity and replacement factor would dwindle, would decline.

[2170] "Q. Would you say that these private label spark plugs, in combination, altogether are a relatively small part of the total spark plug after-market? A. Yes, it is.

"Q. Do you know whether frequently these private label spark plugs are sold alongside of major brands of spark plugs? A. Frequently, yes.

"Q. Have you increased or decreased your spark plug production, Mr. Noznesky, since 1961? A. We increased appreciably.

[2171] "Q. By about how much, would you say, as a percentage? A. Double.

"Q. You mean a one hundred per cent increase? A. Yes.

"Q. Do you have a ceramic operation? A. Yes, we do.

"Q. Where is that? A. At Frenchtown, New Jersey, known as Frenchtown Porcelain.

"Q. When did you acquire Frenchtown Porcelain? A. About late 1959.

"Q. Have you done, since 1961, any increasing of your spark plug manufacturing facilities? A. Yes, we have.

"Q. Where have you increased your facilities? A. In what location?

"Q. Yes, sir. A. In Reading, Pennsylvania. We have a few plants since 1961.

"Q. Would you say that your spark plug operation in total is a modern, efficient spark plug operation? A. Yes, sir.

"Q. Would you have the capacity to handle an original equipment account with a major vehicle maker? A. We would as of now.

[2172] "Q. When you say as of now, you mean—A. Within the recent few months.

"Q. Would you, for example, be in a position to handle the Chrysler original equipment account? A. Yes, we could.

"Q. Would you be willing to do so? A. Yes, sir.

"Q. Would you be eager to do so? A. I would say we would be eager. I might add this, we haven't done a great deal about it as yet, but we are in the planning stage now.

"Q. In the planning stage to do what? A. Of making real contact and some effort, and of course we haven't gotten any word they are at all interested, but we are planning to make contact on the Chrysler Corporation.

"Q. Would you be willing to sell to Chrysler a spark plug under the trademark Mopar? A. Yes, sir.

"Q. Would you be willing to sell to Chrysler a spark plug under the trademark Bowers? A. Yes, sir.

"Q. Would you be willing to do the same with respect to American Motors? A. Yes, sir.

[2173] "Q. When I say the same, I mean the Bowers, but under the Rambler trademark to the American Motors? A. Rambler or Bowers or any other mark that they desired.

"Q. Did you in 1960 or 1961 have conversations with Ford Motor Company concerning the possibility of sup-

plying spark plugs for Ford Motor Company? A. Yes, sir, I did.

"Q. Did you have correspondence with Ford Motor Company in this connection? A. Some.

"Q. I show you a letter dated October—rather, a Xerox copy of one—dated October 27, 1960, from you to Mr. Kohlmeier of the Ford Motor Company, and I ask you whether you can identify the letter. A. Yes, sir, I can identify that.

"Q. Is that a letter that you sent to Ford Motor Company? A. Yes, sir.

Mr. Shapiro: That letter, your Honor, is F-82.

The Court: Yes.

(The reading of the deposition continued.)

"Q. I show you a letter dated March 24, 1961, from you to Mr. Kohlmeier, and I ask you whether you can [2173A] identify that. A. Yes, sir.

"Q. Is that a letter that you sent to Ford Motor Company? A. Yes, sir, I did.

Mr. Shapiro: That letter, your Honor, is F-83.

The Court: May I just inquire as to—I didn't—oh, yes; now I have the answer. All right.

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[2174] "Q. Mr. Noznesky, did your company sustain any injuries as far as you know as a result of the acquisition by Ford Motor Company of the Autolite spark plug facility and trademark? A. We have not sustained any injury that we could determine at all.

"Q. Is that true as to any other assets as far as you know, that were acquired by Ford Motor Company? A. No, no injuries to us at all.

"Q. Neither in your spark plug business nor your battery business, nor any other business? A. Absolutely not.

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CROSS EXAMINATION

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[2203] "Q. You have never sold a company that was manufacturing automobiles? A. No, sir.

"Q. Now, you have indicated that you would be perfectly willing, or you would like to sell spark plugs to at least Chrysler— [2204] A. One of the major motor car companies, yes.

"Q. As I understand it, you have never approached Chrysler for any of their business; didn't you say that? A. Not directly. We have indirectly, but without real sales momentum, or we haven't discussed it in real detail.

"Q. And you also testified, I believe, that you would be willing to sell to Chrysler under the Mopar label. A. Yes, sir.

"Q. Now, F-83 is a letter from you to Mr. Kohlmeier of the Ford Division, dated October 27, 1960, in which you were offering to sell spark plugs to Ford Motor Company; is that correct? A. Well, I don't know that I offered to sell them. I was really finalizing some conversations that we had had earlier, and I had indicated where we were hopeful of getting our costs down.

"Now, surely we had conversations. Those conversations, I had been talking to Mr. Kohlmeier long before this period also with reference to batteries—back even before I came with the General Battery and Ceramic Corporation, about various and sundry; particularly batteries in those days.

"However, this was initiated by a visit of [2205] Mr. Beck, no longer with Ford Motor Company, to our plant

some time before this; perhaps in the spring of 1960. And he had looked over our facility.

"Of course, our facility was not conducive to anyone on a large scale of purchasing spark plugs for us, at that time.

"Q. Did he look over your facility in regard to purchasing the spark plugs or in regard to purchasing the facility? A. No, purchasing the spark plugs. That is an assumption of mine. There was no strong indication on his part of what he was indicating other than our facility.

"Q. As I understand from this letter, you were willing to sell him spark plugs or you thought you would be, at around twenty-six and a half cents per plug. A. That is correct.

"Q. Do you know in 1960 approximately what Ford was paying for spark plugs for original equipment? A. Yes.

"Q. What would that be? A. My knowledge at that time was in the area of six and three-quarter cents.

"Q. Do you know if this was generally true for Chrysler and Delco? [2206] A. Yes, sir, that was—and General Motors. That was also my assumption, that wherever OEM spark plugs were sold, that was the going price.

"Q. Would you be willing to sell spark plugs to Chrysler for original equipment under the Mopar brand at six and a half or seven or eight cents? A. If we could get their replacement sales.

"Q. I am asking under the Mopar business, under the Mopar brand for original equipment. A. Not alone, not OEM alone.

"Q. Why? A. Well, because we couldn't afford to sell them at that price no matter what that would bring us in replacement sales in other areas, in the after-market, so to speak. We don't believe that we could afford to initiate a program of somewhere in the six cent range.

"Q. Today, approximately—I am not trying to get into any trade secrets, so you can give me a range if you want to—what does it cost you to manufacture spark plugs? A. Well, our cost to manufacture a spark plug today is about twenty-one and a half cents. We are not divulging any secrets, that is the fact now.

"We feel we are constantly improving our [2207] techniques and our automation, to get it somewhere below that number, and we feel that twenty-one and a half cents is still a fairly high cost.

"However, added volume would have a tendency to reduce that cost, in itself.

"Q. I understand.

"Approximately what is your cost for ceramics, the ceramic part of the spark plug? A. About five and a half cents.

"Q. So as I understand it, if I do understand your testimony, you would not of course be willing to sell under the Mopar brand to Chrysler only for their original equipment business; is that correct? A. That is my assumption right now.

"Q. And would this be true in sales to Ford for original equipment at that price? A. Yes, sir.

"Q. And this would be true to Delco? A. That is true."

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[2208] "Q. Now, other than this discussion that you had with Mr. Beck of the Ford Motor Company in regard to furnishing spark plugs to Ford, have you made any approach to Ford to get any of their business? A. Not spark plug business. We had made an approach on the battery business.

"Q. But on the spark plug business? A. No, we had not.

"Q. Have you approached Chrysler to get any of their business? A. Not directly, no, sir.

"Q. Have you ever approached General Motors? A. No, sir. That is an impossible task at General Motors.

"Q. Why is that? A. Well, they have all the facility they need, and one hundred per cent of their spark plugs are made by their AC division. The same way with batteries.

"Q. And you have not approached Ford since Ford acquired the Autolite facilities, is that correct, to sell [2209] them spark plugs? A. No, not—

"Q. You had some discussions with Mr. Beck here, but they— A. That was prior.

"Q. Prior to— A. Prior to Ford's purchase of Autolite.

"Q. But since the purchase, you have not approached Ford or had any discussion about selling them spark plugs? A. I might have offhandedly, but no serious discussion."

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"Q. So that you have not, since the acquisition, approached Ford to sell them spark plugs or ceramics; is that correct? A. That is correct.

"Q. And I am talking about ceramics for spark plugs. A. We have asked if they had all the facilities that they needed for spark plug ceramics.

"Q. What did they say? A. They said they did.

"Q. So there wasn't any need for you to furnish them any ceramics? A. That's right."

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[2210] "Q. Now, you had indicated in your testimony here that, I believe—correct me if I am wrong—if Autolite —and I may have this wrong, so correct me—if Autolite lost their original equipment business, they would suffer a very serious decline in their after-market sales; is that cor-

rect? Did you testify to that? A. Yes. We are talking about the Electric Autolite Company.

"Q. I am sorry. Yes. A. As such. It was my opinion if they lost their OEM position, they would note a rapid decline in their after-market sale of spark plugs.

"Q. Would this be true of any company selling original equipment spark plugs to an automotive original equipment installer? A. That would be my opinion, yes, sir."

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[2220] "Q. Now, you had outlined the battery business.

"Could you group the manufacturers of spark plugs in the same way or not? A. Spark plugs, other than the big three.

"Q. And the big three would be— A. Autolite, Champion and AC.

"Q. And when you talk about Autolite, we are talking about today, you are talking about Ford Autolite; correct? A. Yes. The rest of us, as I see it, ourselves, Eltra, Auburn, Hastings, Trojan, Zellers and Leonard—and if there are any others, they are even smaller than we—this group that I speak of, that entails the group other than the major three, and this grouping that I speak of in combination isn't five per cent of the total after-market business.

"Q. Would you be one of the larger ones of the independents? A. We would say so, yes.

"Q. When I say independents, I should say of the [2221] smaller group you were talking about. A. Yes."

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Deposition of George F. Krieger, President of Robert Bosch Corporation

DIRECT EXAMINATION

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[2232] "Q. What is your function, generally, as a corporation? A. Our function is to import Robert Bosch products and to sell them here in the United States.

"Q. Do you sell spark plugs in the United States? A. Yes, we are selling spark plugs.

"Q. Under what brand name? A. Bosch, Germany.

"Q. Are they original equipment on any vehicles? A. On imported parts—imported cars.

"Q. What cars? A. For instance, Volkswagen, Mercedes, Saab, Volvo, practically all European imported cars—Ford, Opel—practically all German cars and parts of European cars.

"Q. When you sell Bosch spark plugs for replacement on these vehicles that the Bosch spark plug is original equipment on, what are your channels of distribution? A. We have two channels. First through the national importers of imported cars, and secondly, through wholesalers, our own service distributors.

"Q. Who are these service distributors? A. Service distributors are mostly the so-called AEA members, and as I said, the national importers.

"Q. Do you know what the initials AEA stand for, by [2233] any chance? A. That's right, Automotive Electric Association.

"Q. And for the most part your distribution of the original equipment type spark plugs is through the AEA warehouse? A. That's right.

"Q. Through that system? A. That's right.

"Q. In addition to your original equipment type spark plugs, spark plugs sold for replacement of original equip-

ment spark plugs, do you also sell spark plugs for replacements on vehicles as to which you are not the original equipment supplier? A. Yes.

"Q. Do you sell spark plugs for replacement in American vehicles? A. Yes.

"Q. You are not original equipment on any American vehicle, are you? A. No.

"Q. Do you have a full line of American vehicle spark plugs? A. Yes.

"Q. Are those contained in your catalog? A. That's right.

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[2234] "Q. As far as your American vehicle spark plugs are concerned, are they of high quality or not? A. Yes, I would say so.

"Q. Are they of quality, in your opinion, comparable to that of Champion? A. Definitely.

"Q. Autolite? A. Definitely.

"Q. AC? A. Yes.

"Q. Do you occupy, with your American vehicle spark plugs, under the Bosch trademark, a substantial [2235] position in the United States after-market? A. No.

"Q. Do you know why that is? A. Because of lack of original equipment supply.

"Q. You mean that you attribute your lack of success, if I can call it that, in the after-market, to the absence of an original equipment status on an American vehicle? A. That's right.

"Q. Well, why would that have any effect on your ability to penetrate the after-market? A. To establish a good sales in the after-market requires definitely the status of original equipment, because this is the only way to substantiate any sales efforts.

"As a proof, you will find the relation between the original equipment supply and the after-market sales a tremendous difference, and it is based on the fact, to have the original equipment.

"Q. Do you mean by that original equipment on any vehicle or original equipment on one of the major vehicles? A. No, I would say on any.

"Q. Depending upon the amount of volume. I mean, you [2236] would say that there is a relationship between after-market sales and original equipment sales? A. Right.

"Q. But if you were a major vehicle, then you would have larger— A. Larger quantities of sales, yes.

"Q. But to have a really substantial position in the after-market, would you require original equipment status in a major vehicle or not, to have major status? A. I would say major vehicle.

"Q. To have major status? A. Yes.

"Q. So there is a relationship between your original equipment status and your after-market status? A. That's right.

"Q. Why is it, Mr. Krieger, that there is a relationship such as you have testified about and that you feel you require major original equipment status to have major after-market status? A. In the automotive industry, usually, every part that has to be replaced will be replaced by an original part. It is a custom, and it is the procedure that every supplier follows, if he has to do it to any repair work of that kind.

[2237] "Q. Well, you are talking about spark plugs now, I assume? A. That's right.

"Q. How does that work? Let's suppose that a customer drives up to a service station for spark plugs.

"Would he demand a particular brand of spark plug? A. Not particularly. The rule is that he will only ask for

replacement of the parts, with the understanding that original parts go into the engine.

"Q. Who would be the one to make the selection? A. The mechanic, the garagiste, where the customer takes his car.

"Q. And would the mechanic or the garagiste, in your view, select more often than not an original equipment spark plug? A. He would select more often the original. Sometimes, of course, he might take another brand—wherever he has a higher profit; that can happen.

"Q. You are talking about the usual rule, the ordinary practice? A. He will replace the original.

"Q. I beg pardon? A. He will replace it by an original spark plug.

"Q. In light of what you say, let me ask your opinion [2238] as somebody who is experienced in this business.

"If the Electric Autolite Company, with which I assume you are familiar—is that right? A. Yes.

"Q. If the Electric Autolite Company had with its Autolite spark plug, for some reason, lost its original equipment status on Chrysler and didn't get it on either Ford or General Motors, what would be your opinion as to— A. I believe they would lose the essential part of their business.

"Q. Do you think that would happen rapidly, or— A. I think so.

"Q. Would your company be available in the United States as an original equipment supplier if you could get the business? A. Yes.

"Q. Would you be available as an original equipment supplier to a major vehicle manufacturer? A. I think so.

"Q. Have you given any consideration to seeking original equipment status with the major vehicle supplier? A. Yes.

"Q. With a major vehicle manufacturer? [2239] A. Yes.

"Q. Which one? A. We were thinking of Chrysler; we were thinking of Ford—I am talking about the past.

"Q. Yes. Are you still thinking of Chrysler? A. But right now we don't see any good chance to approach any engine manufacturer to supply him with our spark plugs.

"Q. Well, put it this way: If a major vehicle manufacturer were to come to you for original equipment replacement supply of spark plugs, would you be in a position to fulfill the demand? A. I think so.

"Q. How would you supply spark plugs? Would you import them or would you— A. We would at the first time import them, depending on the quantity that is involved; we might even consider to manufacture the spark plugs here in this country.

"Q. Would you be in a position to establish a plant in this country? A. I think so.

"Q. You mean if you had a certain amount of volume, you would feel it would be economically feasible for you to do so? [2240] A. Definitely.

"Q. And it would be technically feasible for you to do so? A. Yes.

"Q. You said a minute ago that you had considered supplying spark plugs to Ford Motor Company.

"When was this? A. The end of 1960.

"Q. Did Ford Motor Company indicate any interest in your ability to supply spark plugs? A. Yes, the Ford Motor Company contacted our parent company in Germany through their subsidiary company, Ford—

"Q. Did you submit a bid of any kind? A. Yes."

Mr. Shapiro: Your Honor, at this point F-85 was marked for identification on the deposition.

I resume at page 14, line 10:

"Q. Mr. Krieger, if you had obtained an order for spark plugs along the lines that you have offered to supply them

in the letter dated December 19, 1960, would you have supplied them out of Germany or would you have built a plant here? A. We would have imported the quantities of spark plugs and supplied Ford with the spark plugs.

[2241] "Q. Would you consider then that it would be economically feasible for you to import from abroad and sell here? A. Certainly.

"Q. Do you know of any other foreign manufacturers who either are selling here or have plans to sell here? A. England.

"Q. What company? A. Lodge.

"Q. Any others? A. Japanese.

"Q. What company? A. Hitachi, Nippon Denso, NSK.

"Q. What country is that? A. Japan.

"Q. Are any of these companies that you mention now selling an American vehicle type spark plug in the United States? A. In small quantities, I think so. They imported small quantities.

"Q. Are they selling spark plugs for foreign manufactured vehicles in this country? A. They are trying. Whether they actually did, to my knowledge, they sold only very small quanti- [2242] ties.

"Q. Do you know whether any of the companies you mentioned have a catalogue which includes American vehicle spark plugs? A. All of them have catalogues for American cars.

"Q. Every one that you mentioned? A. Every one.

"Q. And as far as you know, would they be in a position to supply those spark plugs if they were asked to? A. I think so.

"Q. Mr. Krieger, was your company in any way hurt by the acquisition by Ford of certain assets of Electric Autolite in April of 1961, A. I would say 'no'."

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George F. Krieger—Cross Examination

CROSS EXAMINATION

[2243] "Q. Mr. Krieger, would you give us a more definite idea as to the amount of sales by Bosch in this country? A. Yes, I can.

"Q. Could you give us a figure as to annual sales? A. Yes. Last year's sales, 1964, we sold about four and a half million spark plugs.

"Q. In this country? A. In this country.

"Q. Regarding your distribution, and particularly for spark plugs which you make for automobiles on which you are not original equipment, how are those distributed? A. Through wholesalers and jobbers.

"Q. How many wholesale distributors does Bosch have in this country? A. Let me see—I have an exact figure here which I can give you.

"We have about 766 jobbers, and 153 warehouse distributors.

"Q. Have you ever made any study as to what your [2243-A] success has been in getting replacement sales for cars in which you are original equipment? In other words, Volkswagen? A. Yes. For instance, Volkswagen, we are selling, I would say, about—my estimate would be between 60 and 70 per cent of the Volkswagen spark plugs.

[2244] "Q. Is that in this country? A. In this country. You can base it on a figure of import of cars and assuming that each car, registered car, needs about three spark plugs per year.

"Q. And it is your impression that you would sell 60 per cent of the replacement requirements of Volkswagen? A. I would say so."

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"Q. What percentage of your total sales are sales for replacements on Volkswagen? A. You are referring only to spark plug sales?

"Q. That is correct. A. I can give you an exact figure. We are—we have sold last year about two and a half million spark plugs to Volkswagen of American for Volkswagen engines.

"Q. And that is two and a half million out of total sales of four and a half million, you say? A. That's right.

[2245] "Q. And with regard to the other foreign cars on which you are original equipment, do you have any— A. They are relatively small, because of the limited amount of imported cars.

"Q. Would that be another million or less than a million? A. That would be less than a million.

"Q. Half a million? A. I would even say less than that.

"Q. Quarter of a million? A. Approximately.

"Q. Regarding the merchandising of plugs in the United States, it is my impression from your testimony that you stated that it is normal practice for a mechanic to replace a plug with the type of original equipment on the automobile? A. Yes.

"Q. Is it your impression that the ordinary garage service station, and so forth, carries several brands of plugs? A. That's right.

"Q. In accordance with original equipment? A. Right.

"Q. In other words, is it your impression that substantially every garage in the United States would carry Robert Bosch spark plugs— [2246] A. No.

"Q.—for Volkswagens that come in? A. No.

"Q. Well— A. Because there is not the demand for it.

"Q. Well, how does such a service station service a Volkswagen which happens to come in the normal course? A. They replace—the garage, in many cases, replaces the Volkswagen Bosch spark plug by Champion, Autolite, whatever brands you have in the United States. Because they are carrying a certain amount of merchandise of spark plugs anyway, and they have the particular type for Volkswagen available.

"Q. And might that also happen with American cars? In other words, if 60 to 80 per cent of the American automobiles were originally equipped with one or two brands of spark plugs— A. Yes.

"Q. —might it not be that a service station would carry only those one or two brands and service all cars with those brands? A. Yes. I think the percentage, if you compare it with the percentage I stated, I think the percentage might be lower.

[2247] "Q. I am not sure I understand that answer. A. When I said that we have about, according to my estimate, 60 per cent of the potential replacement spark plug business of Volkswagen, I consider this a relatively high percentage, because it is the other way around in the United States, that the possibility is much greater to replace an original spark plug in an imported car by an American brand.

"Q. In other words, you think you are doing better than you might be? A. Yes.

"Q. This tendency to replace an original equipment spark plug with a brand on hand, would you say that that tendency would be increased if one or two brands serviced substantially all original equipment? A. That is very hard to say. That is a matter of opinion.

"Q. In other words, let me rephrase that question:

"If AC and Autolite— A. Yes.

"Q. —were original equipment on 80 per cent of the cars in the United States, would it not be likely that a service station would tend to carry a full line of AC and Autolite, and replace—use those plugs on Chrysler automobiles, and automobiles [2248] that— A. That is possible.

"Q. —that would be more likely, would it not, than if those two brands were original equipment on something less than 80 per cent, say, 60 per cent?

"In other words, the more substantial a market for original equipment, the more likely it is that that plug would be carried as original— A. That's right.

"Q. As equipment— A. As replacement equipment.

"Q. Regarding your offer to sell spark plugs to the Ford Motor Company, I would just like to have you explain the terms of this offer a little bit.

"As I read the letter, you agreed to supply in quantities of one hundred thousand to two hundred thousand per month—let's take the 'B' part of this. A. Yes.

"Q. Delivered freight prepaid to vicinity Detroit, at $26.30 per C. That is per hundred? A. Yes.

"Q. That would be— A. Twenty-six cents—26.3 cents.

"Q. 26.3 cents each? [2249] A. Right.

"Q. This is for original equipment? A. That's right. I don't know whether it was meant for original equipment, or for replacements. I don't know. Since we were asked to supply it in bulk, that means probably that Ford would have put on their own name. That I don't know.

"Q. In other words, since Ford was going to put their own name on this, it made no difference to you whether it was original equipment or replacement, you were going to charge the same price? A. That's right.

"Q. Because the replacement sales didn't go along as it would if you were placing your name on it? A. That's right.

"Q. Did Ford ask you for a bid on original equipment with your name on it? A. No.

"I want to clarify one thing, as far as the name is concerned. The spark plug itself would have had our name 'Bosch, Germany', of course. We are talking only about the packaging.

"Q. Well, a mechanic who looked at the engine and wanted to replace it with the same type spark plug, would he see on that a Ford name or a Bosch name? [2250] A. He grabs the package and sees Ford; he finds out that the name 'Bosch, Germany' is on there later on.

"Q. So that what I am getting at is: If Ford in subsequent years decided to have another manufacturer make that plug for them, in the same type package, the plug that the mechanic would use for replacement would be the Ford plug and not a Bosch plug? A. That's right.

"Q. Whoever manufactured for Ford would get the sale? A. I think so.

"Q. Would you have been interested in supplying Ford with spark plugs under your own brand name? A. Yes.

"Q. If you know, had you been asked to bid on that type of order would your price be possibly less than— A. No, it would not be any price difference.

"Q. Are you aware of the price that American spark plug manufacturers charge to the automobile manufacturers for original equipment plugs? A. Yes, I have a good idea.

"Q. Would you state what your idea is? A. Certainly. I think the original equipment price is about six cents.

"Q. How would that compare with what you would offer to supply them at? [2251] A. Well, the difference is tre-

mendous. As it is known in the industry, the original equipment price hardly covers the production cost, and the profit comes from the after-market.

"Q. I take it you would not have been willing to supply at that price? A. If we could have gotten the original equipment business, we certainly would have revised our price quotation, because the quantity that is involved for original equipment is relatively small in comparison to the after-market sales."

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"Q. Then you would have been willing to supply at six cents if— A. Probably yes; I would say 'yes'.

"Q. That would be original equipment with your name on the plug? A. That's right.

"Q. Are you still interested today in supplying on that [2252] sort of an arrangement? A. Very much so.

"Q. As original equipment on American automobiles? A. Very much so.

"Q. Have you approached any American manufacturers? A. No.

"Q. Do you see any possibility of supplying any American manufacturers? A. I personally believe so, yes.

"Q. Which ones? A. For instance, Chrysler."

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"Q. Any others? A. I couldn't think of—General Motors has its own spark plug.

"Q. And Ford, of course? A. Maybe American Motors would be another potential customer.

"Q. Would you consider Ford a potential customer, today? A. I couldn't visualize that, no.

"Q. Well, is this a change from the pre-Autolite [2253] acquisition position of Ford as a possible purchaser of

your company? A. No, I don't think so even before Autolite.

"Q. Why do you say that? A. Even before Autolite was taken over by Ford, we hardly had any chance even with this quotation. I can say we were surprised that Ford was interested in getting a quotation.

"Q. If Ford did not have its own subsidiary manufacturing spark plugs, would they be in a different position from Chrysler, which you recognize as a potential purchaser today? A. That is possible. It is very hard to say. Because it was known that Ford had a supplier for spark plugs for many, many years.

"Q. Is there any reason why the supplier could not have been changed if a competitive—if through competitive bidding another supplier presented itself, or any reason why a portion of those purchases couldn't have been made from somebody else? A. I think so, because there is a very important fact: the Bosch spark plug is an imported spark plug, so far, and this is a certain disadvantage in comparison to our competitors of American manufacturers of spark plugs.

[2254] "Q. Let's pursue that a little bit.

"It is a disadvantage insofar as what, servicing the contract, or what— A. No, the fact alone that is an imported product, and many manufacturers hesitate to rely on an imported supply of imported merchandise.

"Years back we had certain difficulties along our other products, too. There was a certain tendency to prefer domestic suppliers to any foreign supplier. This has changed now on account of the international connections, and business that has been established. But five or six or seven years ago, there was a very strong tendency against imported products.

"Q. And today the tendency is still there, but somewhat weaker? A. To a certain degree there is from the standpoint of a manufacturer, the—rather he relies on a domestic supplier and an imported. In connection with that, the piers and dock strikes, and so on, the manufacturer is always a little afraid that the production line has to be stopped.

[2255] "Q. So that all things being equal, an American manufacturer would always prefer an American supplier? A. That's right.

"Q. I assume what you say about foreign suppliers would apply not only to Bosch, but also to these other companies that you mentioned? A. I would say so.

"Q. Hitachi, and so forth? A. Yes.

"Q. Correct me if I am wrong, but I believe in your direct testimony you stated that you would consider not only Bosch, but these other Japanese and foreign manufacturers, generally, as potential suppliers of original equipment spark plugs? A. Theoretically speaking, from the practical point of view, I don't think that they have very good chance. It will take a number of years to introduce their product here in the market.

"Q. Do they presently have the capacity to supply the spark plugs in the event they— A. To my knowledge, yes.

"Q. Are you generally familiar with all these corporations? [2256] A. In general, yes.

"Q. Take Hitachi; do you know what the capacity of their spark plug plant is? A. No, I couldn't tell you that. But I am sure that step by step they could build up their production according to the requirements.

"Q. That is what I am getting at. In order to service that sort of contract, they would have to substantially increase their production facilities. A. I think so.

"Q. And your answer was based on the thought that they would be willing to do that? A. Yes.

"Q. If the right contract came along? A. Yes.

"Q. But as of right now, they are not equipped to supply that volume? A. I doubt that very much."

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REDIRECT EXAMINATION

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[2259] "Q. Mr. Kreiger, you stated that your total volume of spark plugs is about four and a half million a year; is that right? A. That's right.

"Q. And I think you said you sell about two and a half million Bosch plugs for Volkswagen application to the Volkswagen distributors here? A. Yes.

"Q. Is that correct? A. Yes.

"Q. Of that four and a half million, approximately [2260] how many do you sell for Volkswagen application outside of the Volkswagen distributorship? A. That is very hard to say, because we don't have any statistic, in order to prove whether of the remaining approximately two million spark plugs, how many go into a Volkswagen.

"Q. You indicated that you thought that the 60 or 70 per cent of the Volkswagen business that you know you do is perhaps better than you might otherwise be doing? A. Yes.

"Q. Did that mean, because you are selling for a foreign car in the United States, that you would expect that American spark plugs would get at least part of that business; is that correct? A. That's right.

"Q. And it was because of the foreign element in your spark plugs sales for Volkswagen here— A. Yes.

"Q. —that you said that you thought you might be doing better than you might otherwise be doing? A. That's right."

RECROSS EXAMINATION

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[2261] "Q. Mr. Shapiro went in again on the question of why it is that you feel that your 65 per cent replacements on Volkswagens might be better than you would be entitled to expect.

"I think you testified in response to his question that one of the reasons for this is that you are a foreign competitor in an American market? A. Yes.

"Q. And therefore you would expect perhaps that your replacement sales might not be as good as an American competitor in the American market; is that—

"Q. No, it can be the other way. Maybe there is a misunderstanding.

"I tried to explain that our share of the potential market seems to me higher than any domestic manufacturer has. The reason for it is, first, that we—the same way as any American original equipment supplier is—we have the original equipment for Volkswagen.

"And second, it works the other way around; [2262] if someone buys an imported car, he might put more emphasis on the fact to get the imported part. I don't know whether I make myself clear. It is a very complex reaction.

"Q. I think I understand you now.

"So that actually, there might be more tendency to replace a spark plug with original equipment brands on a foreign car than there would be on an American car? A. I think so."

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Closing Argument of Jerome G. Shapiro, Attorney for Ford Motor Company

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[2569] The Court: You don't think that Champion would have gone to the point of so reducing its prices that it would price itself out of the market, do you, and make it highly unprofitable for itself to do business?

Mr. Shapiro: Well, your Honor, to stay in as original equipment on Ford Motor Company, Champion would have done a great deal to reduce its profit, but Champion's aftermarket position was based on its dominance in the aftermarket. That is where the profit was.

The Court: Oh, yes, of course. I thought you were talking about both here.

Mr. Shapiro: That is where the profit was, and they needed the original equipment—

The Court: That is what we are talking about here, both.

Mr. Shapiro: Yes, well, that's right. Now, Mr. McManus read from Mr. Duffy: They could handle [2570] their deal with price, the price of original equipment, they could deal with the price and terms of their replacement spark plugs because they were our traditional producers over a long period of time.

Mr. Duffy was talking about the price to Ford of original equipment and replacement spark plugs. But, your Honor, as Mr. Davies testified, the profitability in spark plugs was not in Mr. Davies' price to Ford but was in the aftermarket.

The Court: There isn't any question about that.

Mr. Shapiro: Yes. And the aftermarket, no matter what they charged Ford, even for original

equipment spark plugs, they could have reduced their price drastically to Ford for both original equipment and replacement spark plugs and still have maintained a tremendous profitability because of their position in the sale in the aftermarket.

The Court: Now, I don't know, of course, and we don't have any figures on that, I guess, on just how much they could have reduced the price. They could have reduced it some, probably, and still made money but just how much, we don't know.

Mr. Shapiro: We don't know; but we do know that they could have reduced it enough in Mr. [2571] Duffy's view to have knocked the engine and foundry figures that made it look profitable into a cocked hat, which is what he testified.

The Court: You have Mr. Duffy saying that, but he wasn't making spark plugs.

Mr. Shapiro: Well, your Honor, that is true, but the record—

The Court: What did Champion say about that?

Mr. Shapiro: Well, Champion said that the profitability in spark plugs was in the replacement market, not sale of replacement spark plugs to Ford, but was in the replacement market.

The Court: Yes.

Mr. Shapiro: That is my only point on that, your Honor.

Closing Argument of William H. McManus, Attorney, Department of Justice

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[2574] Now, going to the point about the price to Ford for the replacement market, my only point there, your Honor, is that Champion, who Mr. Davis testified was under an injunction by the FTC that they have to sell their spark plugs at the same price to like customers, which is a requirement of the Robinson-Patman Act, anyway; so that if they were selling spark plugs to Ford, they would have to sell —quantity and everything else being equal—for replacement, they would have to offer the same price to Ford's competitors on the outside. So, if the price that Ford was able to drive down for their replacement sales, Champion would have to meet that on the outside or they would be in violation of the law; and we can't assume they would be in violation of the Robinson-Patman Act.

He also said, Mr. Davis testified, that they were under a directive of the Federal Trade [2575] Commission to sell their plugs at the same price to all people.

The Court: All original equipment.

Mr. McManus: All original equipment to the same type of customer,—

The Court: To the same type of customer.

Mr. McManus: —the same type of customer, of course, being replacement people who would pay a higher price, but all the replacement people would have to pay the same.

That is all I have, your Honor.

EXHIBIT GF-1

Stipulation of Facts Pertaining to Spark Plugs

It is hereby agreed by and between the attorneys for the Department of Justice and Ford Motor Company that the facts set forth in this document are stipulated to be true for the purposes of the prosecution and defense of *United States* v. *Ford Motor Company and The Electric Autolite Company*, Civil Action No. 21911, and for no other purpose and that the stipulations of facts herein contained are to be used solely in this action and for no other purpose whatever.

1. A passenger car is a complex machine assembled from a great number of different parts and components. The typical automobile manufacturer in the United States produces a large quantity of these parts and components and purchases the remainder from many outside suppliers, including competing automobile manufacturers.

2. The first passenger car manufacturers were assemblers of purchased parts. As total vehicle production expanded, many parts and components suppliers grew significantly. These suppliers sold to a number of the automobile manufacturers which originally were dependent upon them. Due in large part to the volume of business provided to the suppliers by the many automobile manufacturers, the suppliers were able to lower their costs, increase the quality of their products, and develop a goodwill of their own.

3. An automobile's performance depends upon the proper functioning of many items. The automobile manufacturer, as well as the supplier, loses goodwill

upon failure of performance in any part. The vehicle maker has a strong incentive to control the quality of a part or component.

4. Internal production of parts and components by automobile manufacturers has been made possible by their possession of sufficient financial resources to allow an alternative to outside purchases. A large cost factor associated with the manufacture of an automobile is the value of the parts and components used in its assembly. Therefore, an automobile manufacturer makes a point of giving continuous attention to the desirability of internally manufacturing the various parts and components used to assemble a vehicle. This attention takes the form of "make-or-buy" studies which evaluate such factors as the quality of the product being supplied, the ability of the supplier to perform, the proximity of the supplier to vehicle assembly installations, the most profitable allocation of the vehicle manufacturer's resources, maximum profits to the vehicle manufacturer, anticipated product volumes, production flexibility, and long-term forward planning.

5. The sales volume of parts and components suppliers for factory installation is subject to wide fluctuation in volume as a result of the ability of automobile manufacturers to shift from outside purchase to internal manufacture and vice versa, and to shift from one supplier to another, and because of the sensitivity of these manufacturers to cost savings and quality control. The factory installation sales, and a part of the replacement sales, of particular

suppliers could be and have been eliminated or reduced by decisions on the part of the automobile manufacturer to produce rather than buy or to shift from one supplier to another. Some suppliers, who have relied heavily on factory installation sales to a particular automobile manufacturer have suffered extensively from having orders from such automobile manufacturer for such parts or components reduced or withdrawn.

6. Because of its large internal consumption, engineering ability, and production facilities, an automobile manufacturer may sometimes produce a particular part of high quality at a cost which cannot be met by other producers, thus enabling it to sell that part to other vehicle manufacturers despite the natural preference of the latter to purchase from non-competitors. For example, Ford and Chrysler purchased their fuel pumps from General Motors for many years.

7. In 1955, Electric Autolite was one of the largest suppliers of automotive parts, the bulk of which (%) were for original equipment sold to automobile manufacturers. Its total sales in 1955 were $296 million, of which $269.3 million or 91% were automotive. In 1957, Electric Autolite's largest customer, Chrysler, which historically accounted for an estimated 40% of Electric Autolite's sales, announced its plans to integrate many of the parts then being purchased from Electric Autolite. As a result of this integration and other factors, in 1960 Electric Autolite's total sales were $221.8 million, of which $156.4 mil-

lion or 71% were automotive, a decrease of $112.9 million in automotive sales from the 1955 level.

8. The Electric Autolite Company was organized in 1922 to acquire the Electric Auto-Lite Division of Willys Corporation, a business which had originated in 1911. By 1929, it was supplying starting, lighting, and ignition parts for factory installation to such domestic automobile manufacturers as Ford, Packard, Nash, Studebaker, and Willys. Its sales in 1929 amounted to over 50% of the domestic factory installation requirements for parts of this type. The balance was supplied by the Delco-Remy Division of General Motors which sold to its parent (34% of total production in 1929) and to Chrysler (8% of total production in 1929). In 1929, Electric Autolite's sales totaled $58.8 million, and net income amounted to $10.5 million.

9. During the period 1931-1933, Ford Motor Company, Electric Autolite's largest customer at the time, began to manufacture parts it had previously purchased from Electric Autolite. Electric Autolite's sales and net income in 1933 fell to $11.6 million and $0.7 million, respectively. In 1934, Electric Autolite merged with Moto Meter Gauge & Equipment Corp. which supplied dashboards and instruments to Chrysler. Royce Martin, Moto Meter's president, became Electric Autolite's chief executive and held that position until his death in 1954. The Chrysler electrical parts account was secured by Electric Autolite's new management late in 1934 from Delco-Remy.

Exhibit GF-1

10. Under Martin's leadership, Electric Autolite prospered. In the pre-war period, sales increased from $19.2 million in 1934 to $94 million in 1941. Net income increased from $1.1 million in 1934 to $5.9 million in 1941. In the post-war period, sales rose from $186 million in 1947 to an all-time high of $296 million in 1955. It is estimated that during the three decade period 1926-1955, exclusive of war years, over 90% of Electric Autolite's sales were for automotive applications.

11. Chrysler's vehicle production totaled 0.5 million units in 1934, 1 million units in 1941, and 1.5 million units in 1955. Electric Autolite supplied virtually all of the starting, lighting, and ignition parts; batteries; spark plugs (after 1940); stop, parking, tail, and turn indicator lamps; instruments; die castings; wire and cable; fractional horsepower motors; and horns required by Chrysler during most of the period 1934-1955. Other factory installation customers of Electric Autolite parts were Nash and Hudson (now American Motors), International Harvester, Studebaker, and Willys.

12. Electric Autolite sold parts to Chrysler for both factory installation and redistribution through Chrysler's MoPar program. Electric Autolite also supplied automotive parts distributors not associated with Chrysler with parts similar to those which it sold to Chrysler.

13. In 1956, Chrysler began to source a portion of its factory installation battery requirements to Gould-National Batteries, Inc., diverting this portion of its

business from Electric Autolite. Electric Autolite's share of Chrysler factory installation battery business was an estimated 75% in 1955, 50% to 59% during 1956-1959, and 36% in 1960. Since the 1963-model year Chrysler has sourced no batteries to Electric Autolite/ELTRA.

14. In 1955, Electric Autolite supplied all of the batteries purchased by Chrysler for redistribution through its MoPar program to Chrysler franchised dealers. Since 1958, Electric Autolite has supplied no batteries to Chrysler for such redistribution.

15. In 1957, Chrysler notified Electric Autolite that starting with its 1961-model year, late in 1960, it would have integrated the bulk of its requirements of distributors, generators/alternators, starters, and voltage regulators. Electric Autolite's sales of these four parts lines to Chrysler amounted to an estimated $42.8 million in 1957, $22.1 million in 1958, $22.1 million in 1959, $17.7 million in 1960, $3.4 million in 1961, and $1.8 million in 1962.

16. The following table shows Chrysler's decrease in sourcing of the four electrical parts lines, batteries and other parts (primarily miscellaneous electrical parts, instruments, and bumpers) to Electric Autolite for both factory installation and replacement during the period 1957-1965.

Exhibit GF-1

Electric Autolite Sales to Chrysler

	4 Electrical Parts Lines(a)	Batteries	All Other Parts	Total
Total Sales (Millions)				
1957	$42.8	$6.4	$93.4	$142.6
1958	22.1	2.6	39.8	64.5
1959	22.1	3.0	36.7	61.8
1960	17.7	2.9	37.1	57.7
1961	3.4	2.4	21.1	26.8
1962	1.8	1.1	18.8	21.7
1963(b)				
1964(b)				
1965(b)				
Sales Per Vehicle Assembled by Chrysler				
1957	$32.93	$4.89	$71.94	$109.76
1958	34.56	4.00	62.23	100.79
1959	27.27	3.69	45.40	76.36
1960	16.29(c)	2.67	33.97	52.93
1961				
1962				
1963(b)				
1964(b)				
1965(b)				

(a) Data for 1957 were supplied on page 5 of Electric Autolite's 1959 Annual Report. Data for the years 1958-1962 were computed on the basis of information provided on page 25 of Electric Autolite's Proxy Statement dated May 29, 1963.

(b) Data for 1963-1965 represent ELTRA Corporation's fiscal years ending September 30.

(c) Chrysler purchased the bulk of these parts only during the first nine months of 1960; for comparative purposes, however, computation is on the basis of twelve months' production.

Exhibit GF-1

17. During the 1950's, there was an acceleration of the trend away from franchised vehicle dealers as repair outlets for installation of spark plugs, batteries, and electrical parts. For example, the franchised dealers' share of automobile tune-ups, the primary occasion for replacement of spark plugs and certain electrical parts, was 50% in 1951, 45% in 1953, 52% in 1955, 35% in 1957, 26% in 1959, 28% in 1961, and % in 1963.

18. Decreasing service station profit margins during the 1950's led national oil companies to stress service work as a means of partially restoring service station income. Service stations and independent garages were able to capture a share of the repair business lost by franchised vehicle dealers. The share of tune-up business attributed to service stations was % in 1951, % in 1953, % in 1955, 16% in 1957, 25% in 1959, 20% in 1961, and % in 1963. The share of tune-up business attributed to independent garages was % in 1951, % in 1953, % in 1955, 39% in 1957, 35% in 1959, 35% in 1961 and % in 1963.

19. The shift in repair business from franchised dealers to service stations, independent garages, and other retail outlets affected the positions and policies of the manufacturers and distributors of the parts used in repairs. Because repair volume was moving toward repair outlets oriented to servicing all makes of cars, rather than single makes, it became advantageous for parts manufacturers and distributors to follow the volume market by offering lines of parts

applicable to all makes of cars. Spark plug and battery manufacturers and distributors had historically offered lines which would service all makes of cars, but this was not true with respect to electrical parts. The manufacturers of electrical parts which offered parts applying to all makes of vehicles were relatively small companies, and, generally speaking, they did not produce parts for factory installation. Their production was limited to certain fast-moving parts. Ford and Electric Autolite, on the other hand, produced electrical parts in large volume for factory installation, and offered them as "authentic" replacement parts. The Delco-Remy Division of General Motors manufactured General Motors parts (Delco-Remy systems) exclusively until the late 1950's, at which time it started limited production of fast-moving parts for other makes (non-Delco-Remy systems) of automobiles as well. The following table indicates the percentages of sales by General Motors of Delco-Remy service parts and non-Delco-Remy service parts to total sales of service parts by General Motors. Included among the parts are generators, voltage regulators, starting motors, distributors, ignition coils, switches, horn relays, and component parts therefor.

Exhibit GF-1

GENERAL MOTORS AFTERMARKET
SALES OF SERVICE
PARTS TO WAREHOUSE DISTRIBUTORS AND TBA
PROGRAMS, 1959-1964

	Delco-Remy Systems		Non-Delco-Remy Systems	
	Produced by General Motors	Produced by General Motors	Purchased by General Motors	Purchased by General Motors
1959				
1960				
1961				
1962				
1963				
1964				

20. Electric Autolite tried to strengthen its aftermarket performance by allying its distribution with that of other corporations. During 1959-1960, Autolite (supplier of electrical parts to Chrysler), Carter (supplier of carburetion parts to Chrysler and General Motors), and Holley (supplier of carburetion and electrical parts to Ford), initiated an "ACH" line of parts applying to all makes of vehicles to be offered to the tire, battery and accessory (TBA) programs of major oil and rubber companies, sold through tire stores and gasoline service stations. The "ACH" program developed a catalog covering electrical systems, fuels systems, gasoline filters, and fuel pumps. The three manufacturers sold cabinets and distributed promotional material. Each company signed those AEA central warehouses which it was not theretofore using but which handled the lines of either or both of the other two companies. Electric

Autolite signed 6 additional warehouses; Carter signed 20 and Holley signed 23. The ACH program succeeded in selling to only one TBA account, Richfield Oil.

21. Since 1957 Electric Autolite has pursued a program of diversification through investment, acquisition and internal development.

22. Spark plugs for use in the gasoline or gas-operated engines of automobiles, trucks, and buses as well as similar engines used for industrial, construction, farm, marine, and other purposes are included in this stipulation, but spark plugs for use in aircraft and diesel engines are excluded.

23. Vehicles powered by gasoline engines are factory-equipped with spark plugs and contain spark plugs when sold by their manufacturers. The same is also true of many other non-vehicular products powered by internal combustion engines. Vehicles powered by gasoline engines use a number of spark plugs equivalent to the number of cylinders in the engine, generally either six or eight. Such engines normally have a lifetime comparable to 5 or more spark plug lifetimes per cylinder. A passenger car thus consumes some 30 to 40 replacement spark plugs during its lifetime.

24. The important functional elements of a spark plug are the center electrode, ground electrode, steel shell, ceramic insulator, and seal. The center electrode is connected to the ignition coil through the distributor by high-tension wiring. The ground electrode is attached to the steel shell and grounded to the engine

in which the spark plug is installed. The ceramic insulator, which is seated within the metal shell and secured by the seal, covers the center electrode for most of its length and separates it from the steel shell. At the tip (bottom) of the spark plug assembly, the center electrode extends out of the insulator and is separated from the ground electrode by a distance varying from .015 to .050 inches. This distance is known as the spark gap, and when a spark plug is installed, the gap is within the combustion chamber of the cylinder.

25. A spark plug provides the spark that ignites the fuel-air mixture in the cylinder of an internal combustion engine. An electrical charge flows from distributor through the center electrode prior to the time of maximum compression of the fuel-air mixture in the combustion chamber. This charge flows down the center electrode and completes its circuit by jumping the gap to the ground electrode, thus producing a spark. The spark ignites the fuel-air mixture and the resultant combustion forces the piston down, turning the crankshaft and releasing the mechanical energy of the engine.

26. The basic design and function of a spark plug are widely standardized. No significant area of spark plug technology is protected by patent. As spark plugs are of small size, they are readily stored in quantity and distributed throughout the United States from a single production location. Industry production capacity has always exceeded demand; although occasional shortages have been encountered in particular types, there has never been a general shortage of spark plugs.

Exhibit GF-1

27. No substitute product has the same physical or functional characteristics as has a spark plug; no other product may be used in its stead to accomplish the same results. Spark plugs are recognized by the industry and the public as a separate and distinct economic market.

28. The spark plug is distinguished from other components of the ignition system by the fact that it protrudes into the combustion chambers of the engine. This subjects the spark plug to the violent stresses and pressures as well as the extreme temperature changes that accompany the process of internal combustion. The spark plug, intrinsic to the engine in which it is installed, must respond to that engine's particular characteristics. Spark plug malfunctioning will have significant adverse effects upon overall vehicle performance.

29. One characteristic which varies from engine to engine is the range of internal operating temperatures. The temperature of the same engine changes under differing load conditions, while the temperature of differing engines may be the same or different under identical load conditions. A spark plug can function properly in an engine only if it is conformed to the temperature ranges of that engine. The heat which passes from an operating engine into its spark plugs must be absorbed and dissipated by those plugs at precise rates. If the plug dissipates the heat too slowly, the plug will overheat. In an overheated plug, (1) the spark plug electrodes may burn out; or (2) pre-ignition may cause extensive damage to the engine, warping or perforating the piston head. If the plug dissipates the heat too

quickly, it may become so fouled as to impair or prevent its sparking function. Fouling is caused by both the fuel and the combustion process. Fuels for modern engines contain lead which builds deposits on the insulator tip unless the tip is sufficiently hot to burn off the lead deposits as they form. The sooty carbon residue of combustion also impedes the functioning of the spark plug unless the tip is sufficiently hot to burn it off.

30. The capacity of a spark plug to operate efficiently under differing heat conditions is known as the plug's heat range. The heat range of a spark plug is determined by a number of factors, including the conformation of the insulator, the length of the insulator tip, the dimensions of the electrodes, the distance between the shell and the insulator tip, and the heat conductivity of the materials employed in the production of the insulator, center electrode, and shell.

31. The problems of temperature adaptation which arise from the location of the spark plug tip within the combustion chamber distinguish spark plugs from the other, externally located, ignition components in both production and procurement. The battery, ignition coil, distributor, and high-tension wiring components of the ignition system may each be produced by a supplier and procured by a vehicle manufacturer primarily on the basis of engineering specifications with little testing in the engine under actual operating conditions. These items may be characterized as "drawing-board" parts while, by contrast, the spark plug is a "trial-and-error" part which is produced and procured in quite a different manner.

Conforming the heat characteristics of a particular spark plug to the internal operating conditions and temperatures of a given engine can be accomplished only by extensive experimentation and trial-and-error testing on operating models of that engine. Consequently, the correct spark plug for factory installation in a new engine is not found until it has been tested for hundreds of hours in prototype engines and for hundreds of thousands of miles in road test engines.

32. Because of the heat range problem, and because of the violent stresses and pressures to which a spark plug is subjected, a spark plug must be "qualified" for acceptance by the vehicle maker's engineers before it can be used for factory installation.

33. The qualification process employed to determine acceptance of spark plugs for factory installation is lengthy and expensive. It requires close and continuing cooperation between the engineering staff of the vehicle manufacturer and the engineering staff of the spark plug producer.

34. The qualification process is undertaken every time a vehicle manufacturer develops a new engine model or adapts an existing engine in such a way as to vary its heat characteristics. A comparable procedure is also necessary if a vehicle manufacturer changes spark plug suppliers. In April 1961, at the time Ford acquired the Fostoria plant from Electric Autolite, Autolite produced five plugs which it offered to the public as suitable for replacement use on Ford-built vehicles. Nevertheless, two months of intensive testing, at a cost of $125,000, were required

before the Ford engineers could qualify four modified Autolite plugs for factory installation on Ford-built vehicles, and another year was required to qualify a fifth Autolite plug. At the same time, Champion offered a number of spark plugs as suitable for replacement use on Chrysler-built vehicles. It took Chrysler engineers a comparable time to qualify most Champion plugs for factory installation on Chrysler-built vehicles. However, more than a year was required to qualify certain other Champion plugs for factory installation on Chrysler-built vehicles. During the period in which Champion was being qualified by Chrysler, Ford's Fostoria plant supplied Chrysler with the plugs it needed for factory installation.

35. Spark plug manufacturers other than the factory qualified source offer spark plugs for replacement purposes which in their judgment approximate the factory-qualified plug as to threading, reach, and heat range characteristics. The reach and threading are widely standardized and can be physically duplicated. But heat range characteristics cannot be exactly duplicated by physical comparison. It is not economically feasible for other spark plug producers to subject plugs developed by them to the same extensive testing as was involved in the qualification process undertaken by the vehicle maker's spark plug source. Therefore, another spark plug manufacturer will judge whether it produces any spark plug which possesses a heat range comparable to that of the factory qualified plug. This judgment is based primarily on comparing heat range measurements of the two plugs on the spark plug maker's rating

engine, and undertaking such field testing as the plug maker typically uses, such as fleet installation. If the spark plug manufacturer has no comparable plug, it develops one and offers it for sale. Following this procedure, most spark plug manufacturers offer lines of plugs which they feel are suitable replacements for the factory qualified plug. However, such plugs may not meet the particular standards developed by the vehicle maker's engineers.

36. Spark plug manufacture in the United States began with the introduction of the internal combustion engine during the 1890's. The first company to manufacture spark plugs in commercial quantities was the Champion Ignition Company. It utilized the brand name 'Champion' which was so well-known that 'Champion' came to be used synonymously with 'spark plug'. It was the sole supplier of spark plugs to virtually all vehicle and other equipment manufacturers operating in the United States. In 1909, General Motors purchased all of the assets of the Champion Ignition Company, with the exception of the name 'Champion'. These assets were formed into the predecessor organization of the present AC Spark Plug Division of General Motors which began to manufacture spark plugs under the 'AC' brand, primarily for use by General Motors. At about the same time, members of the Stranahan family purchased the 'Champion' name and formed the predecessor organization of the present Champion Spark Plug Company which began manufacture of spark plugs under the 'Champion' brand, primarily for use by Ford.

Exhibit GF-1

37. From 1909 until 1936 Champion and AC were the only two significant domestic spark plug producers. They dominated the manufacture and sale of plugs and accounted for virtually every spark plug installed in assembled vehicles and for most of the spark plugs sold through franchised dealer outlets. In 1924, Champion supplied 80% of all the spark plugs used by vehicle manufacturers for installation in assembled vehicles, and it is estimated that Champion sold more than 65% of all plugs used in factory installation during the period 1909-1936. During the entire period from 1909 to 1936, Champion and AC together accounted for more than 90% of all spark plugs produced and sold in the United States.

38. In about 1936, Electric Autolite, long a major electrical and ignition parts supplier to Chrysler and other automobile companies, entered the spark plug business. Robert Twells, a spark plug engineer who had been employed by both Champion and AC, approached Chrysler in an effort to induce it to manufacture spark plugs. Chrysler referred Twells to Electric Autolite. Electric Autolite, assured of receiving Chrysler's spark plug business, converted its Fostoria plant to the manufacture of spark plugs. Electric Autolite's entry into the spark plug industry was made possible by the transfer of the Chrysler business from AC to Autolite as soon as 'Autolite' spark plugs could be developed and qualified for factory installation on Chrysler-built vehicles. Including plant startup, about five years (1936-1940) were required to design, produce, and qualify 'Autolite' spark plugs for factory installation on all Chrysler-built vehicles.

Exhibit GF-1

39. Chrysler's spark plug factory installation business gave Electric Autolite the volume needed to set up an efficient large scale plant and the endorsement of a major vehicle manufacturer. This latter factor was necessary to create a significant demand for 'Autolite' spark plugs in distribution outlets independent of Chrysler. Thus, without more, Electric Autolite was able to gain a significant share of the spark plug market. During the period 1937-1954, Electric Autolite's share of the spark plug market was about 15%, while AC's was slightly less than 30% and Champion's was in excess of 50%.

40. Champion held a dominant position during the early years of the industry. Champion recognized that the automobile manufacturers to which it sold spark plugs might produce their own requirements as an alternative to purchasing from it. As a deterrent to such manufacture, commencing in 1920, Champion initiated the practice of supplying 'Champion' spark plugs to automobile manufacturers for factory installation at the below-cost price of $.0588 per plug. Ever since 1920, the below-cost of $.0588 per factory installation plug has been traditional in the industry. With each successive increase in production costs since 1920, the loss on sales at $.0588 for factory installation has increased. Such losses for the spark plug manufacturer were gains for the automobile manufacturer and thus tended to discourage the integration of spark plugs.

41. During the 1961-model year, Ford and Champion operated under their traditional purchase order providing that Champion would supply all of Ford's factory installation spark plug requirements at $.0588 per unit, as it had for the past 41 years. On

Exhibit GF-1

April 13, 1961, Ford advised Champion that Ford expected to fulfill its outstanding orders for factory installation spark plugs, but that it could not commit itself to purchase factory installation plugs beyond the expiration of the contract in October of 1961. On May 5, 1961, Champion informed Ford that it would supply Ford's minimum factory installation spark plug requirements for its 1961 models if Ford would either source 10% of its 1962-model factory installation spark plug requirements to Champion, or pay Champion $.196 (20¢ less a 2% cash discount) for each factory installation spark plug purchased, an amount Champion stated to be equal to its costs of manufacture. On May 23, 1961, Ford executed a purchase order for 2 million spark plugs for factory installation during the months of June and July at $.196 per unit.

42. The losses which the spark plug manufacturer incurs through sales of plugs at below cost for factory installation may be balanced by sales of plugs at a profit to the factory installation user for redistribution to its franchised dealers for replacement use. During the period 1920-1960, Champion more than balanced its losses on sales of factory installation plugs to Ford by its profits on the plugs sold to Ford for redistribution to its franchised dealers. In the majority of years, Electric Autolite balanced its losses on similar sales to Chrysler.

43. However, most factory installation users do not offer the spark plug manufacturer a chance to balance factory installation sales through their replacement distribution systems. For example, Clinton Engine purchases 'Champion' plugs at $.0588 for factory in-

stallation; yet, since Clinton Engine has no franchised dealer organization, Champion cannot balance the losses it sustains on sales to Clinton for factory installation with profitable replacement sales to Clinton. The supplier of replacement spark plugs bases its sales to such accounts on the theory that factory installation of its proprietary brand spark plugs will exert a sufficient pull to generate replacement sales of the supplier's brand through the supplier's total distribution system.

44. To the extent that spark plugs are replaced with the factory installation brand, the spark plug manufacturer realizes a return on his investment in below-cost factory installation plugs. There is a well-established custom of replacing the spark plugs in a vehicle with the brand of spark plugs which were factory installed in that vehicle. Usage of a particular spark plug by a vehicle manufacturer guarantees to the public that, in the vehicle manufacturer's judgment, the plug is technically reliable and appropriate for the year, make and model of the car in which it was originally used. Thus, the installer has reason to use the plug recommended by the vehicle manufacturer. From a combination of these factors, the spark plug manufacturer is able to take advantage of its factory installation position to develop a goodwill of its own.

45. The vehicle manufacturer profits from redistribution of spark plugs to its franchised dealer organization. During the period 1955-1960, Ford averaged approximately $3.5 million in gross profits per year from spark plug redistribution to its franchised dealers.

Exhibit GF-1

46. The following table shows the spark plug sources for the major vehicle manufacturers during 1936-1965.

Vehicle Manufacturer Factory Installation
Spark Plug Sourcing—By Brand
1936-1965—Model Years

Model Year	Brand of Spark Plug Used—By Automobile Manufacturer						
	General Motors	Ford	Chrysler	Nash-Kelvinator	Hudson Motor Car (b)	Packard Motor Car	Studebaker (c)
1936	AC	Champion	AC	AC	Champion	AC	Champion
1937 (a)	"	"	Autolite-Champion	Autolite-AC	"	AC-Champion	"
1938	"	"	"	"	"	"	"
1939 (a)	"	"	"	"	"	"	"
1940	"	"	"	"	"	"	"
1941	"	"	Autolite	"	"	AC	"
1942	"	"	"	"	"	AC-Champion	"
World War II							
1946	"	"	"	"	"	"	"
1947 (a)	"	"	"	"	"	Autolite-AC-Champion	"
1948	"	"	"	"	"	"	"
1949	"	"	"	"	"	"	"
1950	"	"	"	"	"	"	"
1951	"	"	"	"	"	"	"
1952	"	"	"	Autolite	"	"	"
1953	"	"	"	"	"	"	"
1954	"	"	"	"	"	Champion	"
				American Motors		Studebaker	
1955	"	"	"	Autolite-Champion	"	Champion	"
1956	"	"	"	"	"	"	"
1957	"	"	"	"	"	"	"
1958	"	"	"	"	"	"	"
1959	"	"	"	"	"	"	"
1960	"	"	"	"	"	"	"
1961	"	"	"	"	"	"	"
1962	"	Autolite	Champion	Champion	"	"	"
1963	"	"	"	"	"	"	"
1964	"	"	Champion-MoPar	"	"	"	"
1965	"	"	"	"	"	"	"

(a) Exact data are not available for these years. The pattern has been assumed to follow that of the succeeding year.
(b) Nash-Kelvinator and Hudson Motor Car merged on May 1, 1954.
(c) Packard Motor Car Co. and Studebaker Corp. merged on October 1, 1954.

Exhibit GF-1

47. No spark plug brand has ever attained more than 2% of the industry without factory-installation status. The suppliers to the automobile manufacturers have always held more than 90% of the entire industry. The field has only once been entered on a greater than 2% basis since 1910, and on that occasion it was entered by Electric Autolite with the cooperation of a vehicle manufacturer—Chrysler. Until 1964 only three brands had been factory installed on passenger vehicles: 'AC', 'Champion', and 'Autolite'. In 1964 Chrysler began to factory install 'MoPar', as well as 'Champion', spark plugs on its vehicles. This is the first occasion on which a brand other than 'Champion', 'AC', or 'Autolite' has been factory installed on any vehicle.

48. The following table shows total domestic shipments of spark plugs by domestic producers in units for each of the years 1955 through 1964. It is estimated that in excess of 90% of these spark plugs were used in automobiles and trucks.

UNIT SHIPMENTS*

Year	Original Equipment Units	Replacement Units	Industry Shipments
	(000)	(000)	(000)
1955	76,620	300,042	376,662
1956	60,513	316,100	376,613
1957	61,837	325,924	387,761
1958	45,852	326,999**	372,851**
1959	58,936	359,498	418,434
1960	63,657	338,978	402,635
1961	52,907	392,488	445,395
1962	66,296	408,548	474,844
1963	73,776	431,964	505,740
1964	76,153	456,072	532,225

* Estimated.

** Estimated independently of the Census of Manufactures.

Exhibit GF-1

49. The following table shows estimated domestic spark plug shipments for use on original equipment broken down by type of vehicle installed in.

ORIGINAL EQUIPMENT MANUFACTURE
SPARK PLUG UTILIZATION

Year	Automobile	Trucks and Buses	Outboard Motor	Other Products(a)	Total Units
	(000)	(000)	(000)	(000)	(000)
1955	60,138	8,361	1,252	6,869	76,620
1956	44,117	7,334	1,574	7,488	60,513
1957	46,808	7,247	1,347	6,435	61,837
1958	31,737	5,754	1,237	7,124	45,852
1959	41,393	7,466	1,326	8,751	58,936
1960	47,944	7,407	1,149	7,157	63,657
1961	38,272	6,951	842	6,842	52,907
1962	49,365	7,698	884	8,349	66,296
1963	55,568	9,162	889	8,157	73,776
1964	57,099	9,912	960	8,182	76,153

(a) Excludes an undetermined number of OEM spark plugs installed in aircraft.

50. Champion ships completed units from three domestic spark plug plants and produces spark plug components in two others. Until 1962, all of these units bore the 'Champion' proprietary brand, but approximately 3% were boxed under the private brand of the purchaser—'Allstate' (Sears Roebuck), 'Atlas' (Standard Oil), and 'Riverside' (Montgomery Ward).

Exhibit GF-1

51. The following table shows the domestic spark plug market performance of Champion Spark Plug Company during 1955-1964.

CHAMPION SPARK PLUG COMPANY

Year	Original Equipment Units (000)	Replacement Units (000)	Total Units (000)
1955	29,241	171,490	200,731
1956	23,953	166,461	190,414
1957	24,487	172,915	197,402
1958	17,556	171,627	189,183
1959	26,671	181,155	207,826
1960	25,360	169,674	195,034
1961*	14,906	194,055	208,961
1962*	17,513	186,738	204,251
1963*	18,536	189,389	207,925
1964*	19,771	192,103	211,874

* Estimated.

52. The following table shows Champion's corporate performance during the period 1948-1965. All data shown represent Champion's consolidated world-wide operations.

Exhibit GF-1

	Net Sales	Net Profits	Net Profit as % of Net Sales	Total Assets(a)	Net Worth(b)
	(000)	(000)		(000)	(000)
1948	$ 35,720	$ 4,667	13.1%	$ NA	$ NA
1949	34,035	4,475	13.1	NA	NA
1950	46,356	7,098	15.3	NA	NA
1951	57,405	6,000	10.5	36,294	19,132
1952	62,097	5,753	9.3	37,604	20,080
1953	65,702	6,481	9.9	39,763	22,384
1954	70,696	10,508	14.9	45,311	27,695
1955	78,113	12,447	15.9	53,947	34,911
1956	83,275	13,683	16.4	62,410	43,025
1957	89,283	13,783	15.4	68,101	49,767
1958	94,293	15,552	16.5	77,376	58,440
1959	104,878	16,405	15.6	84,181	64,837
1960	100,596	16,723	16.6	89,414	70,646
1961	97,372	14,829	15.2	90,984	73,383
1962	100,398	14,454	14.4	95,108	75,822
1963	109,273	15,015	13.7	101,894	79,967
1964	124,348	16,698	13.4	108,558	84,497
1965	131,378	18,589	14.1	114,434	90,175

NA—Not Available.

(a) Total assets less depreciation and amortization.

(b) Capital stock, surplus and retained earnings.

53. AC operates one domestic spark plug plant from which it distributes throughout the United States. AC produces other automotive parts in addition to spark plugs such as fuel pumps, parts, and kits; oil, air, and fuel filters and elements; radiator, gas tank,

and oil filter caps; speedometers and instrument clusters; fuel tank senders, temperature senders, and gauges; flexible gasoline and oil lines; guide lamps; and positive crankcase ventilation valves and kits. All of its products, including spark plugs, are factory-installed under the 'AC' brand on General Motors vehicles.

54. The following table shows the domestic spark plug market performance of the AC Division of General Motors during 1955-1964.

AC Division, General Motors

Year	Original Equipment Units (000)	Replacement Units (000)	Total Units (000)
1955			
1956			
1957			
1958			
1959			
1960	[See Separate Stipulation]		
1961			
1962			
1963			
1964			

55. Prior to April 12, 1961, Electric Autolite was the third largest spark plug producer in the United States. During the period 1956-1960, it accounted for approximately 13% of domestic spark plug shipments, averaged 52 million units per year, and had total sales of 261 million units. These plugs were predominantly of the 'Autolite' brand, but some

2% bore private brands. Electric Autolite operated the Fostoria spark plug plant and from this one plant distributed nationally. Electric Autolite/ELTRA Corporation now operates the Decatur (Alabama) plant which has produced spark plugs since mid-1962.

56. The following table shows domestic spark plug market performance of Electric Autolite/ELTRA during 1955-1964.

ELECTRIC AUTOLITE/ELTRA

Year	Original Equipment Units (000)	Replacement Units (000)	Total Units (000)
1955	14,223	39,488	53,711
1956	9,911	37,582	47,493
1957	12,475	43,422	55,897
1958	8,597	37,594	46,191
1959	8,233	44,469	52,702
1960	10,468	42,420	52,888
1961	6,200	16,868	23,068
1962	1,614	8,299	9,913
1963*	40	10,114	10,154
1964*	45	8,487	8,532

* Estimated from fiscal year data.

57. The following table shows domestic shipments of ELTRA Corporation during 1961-1964 by customer category.

Exhibit GF-1

ELTRA Corporation
Unit Shipments

	1961	1962	1963	1964
Factory Installation:				
Chrysler and American Motors	4,344,378	490,528		
Ford	—	—		
Miscellaneous Vehicle and Other Equipment Manufacturers	1,855,439	1,123,397		
Total Factory Installation	6,199,817	1,613,925		
Replacement:				
Franchised Dealer Organizations				
Chrysler and American Motors	3,559,161	133,180		
Ford	—	4,694,998		
	3,559,161	4,828,178		
Miscellaneous Vehicle and Other Equipment Manufacturers	NA	NA		
Warehouse Distributors	9,583,117	12,147		
TBA Programs	NA	NA		
Other	NA	NA		
Total Replacement	16,867,472	8,299,010		
Total Shipments	23,067,289	9,912,935		
Memo: Shipments Excluded				
Government Sales	1,407,852	310,300		
Export Sales	2,362,231	591,542		
Sales to other Spark Plug Manufacturers	—	—		
Total	3,770,073	901,849		

NA—Not Available.

58. Ford operates one domestic spark plug plant from which it distributes throughout the United States. With insignificant exceptions, all Ford sales are of the 'Autolite' brand. 'Autolite' spark plugs have been factory installed on all Ford-built vehicles since the summer of 1961.

59. Shipments from the Fostoria plant during the period 1956-1964 have been as follows:

	Unit Shipments										
	Electric Autolite					1961			Ford		
	1956	1957	1958	1959	1960	Electric Autolite(a)	Ford(b)	Total	1962	1963	1964
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
Factory Installation:											
Chrysler and American Motors ..	7,763	10,589	6,969	6,191	8,718	1,044	—	1,044	—	—	—
Ford	—	—	—	—	—	—	7,342	7,342	16,623	17,694	19,360
	7,763	10,589	6,969	6,191	8,718	1,044	7,342	8,386	16,623	17,694	19,360
Miscellaneous Vehicle and Other Equipment Manufacturers	2,148	1,886	1,628	2,042	1,750	511	—	511	881	1,515	1,103
Total Factory Installation ..	9,911	12,475	8,597	8,233	10,468	1,555	7,342	8,897	17,504	19,209	20,463
Replacement:											
Franchised Dealer Organizations:											
Chrysler and American Motors	5,967	5,682	6,223	7,045	5,691	1,584	—	1,584	—	113	78
Ford	—	—	—	—	—	—	11,882	11,882	10,919(c)	11,261(c)	16,654(c)
	5,967	5,682	6,223	7,045	5,691	1,584	11,882	13,466	10,919	11,374	16,732
Miscellaneous Vehicle and Other Equipment Manufacturers	NA	NA	NA	321	420	97	84	181	158	196	70
Warehouse Distributors	28,148	34,636	29,353	34,598	34,045	9,506	25,467	34,973	43,038	40,717	46,840
TBA Programs	NA	NA	NA	2,505	2,264	971	368	1,339	2,066	2,058	1,658
Other	NA	NA	NA	—	—	—	270	270	829	728	1,363
Total Replacement	37,582	43,422	37,594	44,469	42,420	12,158	38,071	50,229	57,010	55,073	66,663
Total Shipments	47,493	55,897	46,191	52,702	52,888	13,713	45,413	59,126	74,514	74,282	87,126
Memo: Shipments Excluded:											
Government Sales	1,792	2,093	629	4,255	1,958	111	1,175	1,286	2,514	2,030	1,315
Export Sales	4,352	4,909	4,500	5,297	4,835	1,793	3,056	4,849	3,828	5,402	3,335
Sales to other Spark Plug Mfrs.	—	—	—	(d)	(d)	(d)	8,861(e)	8,861(e)	4,333(e)	519(e)	37(e)
Total	6,144	7,002	5,129	9,552	6,793	1,904(f)	13,092	14,996	10,675	7,951	4,687

(a) January 1-April 11 shipments; Electric Autolite shipped an additional 9.4 million units during the balance of 1961. Total shipments by Electric Autolite from all sources in 1961 were 23,068,000, composed of 6,200,000 factory installation units and 16,868,000 replacement units.

(b) April 12-December 31 shipments.

(c) An additional 4.7 million units in 1962, 4.9 million units in 1963 and 2.2 million units in 1964 sold by Ford franchised dealers were supplied by Electric Autolite.

(d) Unit shipments to other spark plug manufacturers are not available. It is doubtful if such shipments were significant.

(e) The majority of these units were sold to Electric Autolite in order to permit that Company to meet its obligations under the Purchase Parts Agreement. Electric Autolite sold some of these units to Chrysler and American Motors for factory installation during the last 8⅓ months of 1961 and some units to Chrysler during 1962 and 1963 for this purpose. Replacement sales were made to both American Motors and Chrysler during the last 8⅓ months of 1961 and to American Motors in 1962.

(f) January 1-April 11 shipments; Electric Autolite shipped an additional 1.9 million excluded units during the balance of 1961.

Exhibit GF-1

Exhibit GF-1

60. Ford purchased spark plugs from ELTRA Corporation during 1962-1964 as follows:

FORD PURCHASES OF SPARK PLUGS FROM ELTRA CORPORATION

Year	Original Equipment Units	Replacement Units	Total Units
	(000)	(000)	(000)
1962	None	4,695	4,695
1963	None	4,927	4,927
1964	None	2,233	2,233

61. The following table shows the domestic spark plug market performance of Ford Motor Company during 1961-1964.

FORD MOTOR COMPANY

Year	Original Equipment Units	Replacement Units	Total Units
	(000)	(000)	(000)
1961*	7,342	38,071	45,413
1962	17,504	57,010	74,514
1963	19,209	55,073	74,282
1964	20,463	66,663	87,126

* April 12 to December 31.

62. In addition to Champion, AC, Electric Autolite/ELTRA and Ford, there are a number of small spark plug manufacturers and assemblers which for the purposes of this stipulation are assumed to have accounted for approximately 15 million units of total production each year during the period 1955-1964. Few of these companies sell proprietary brand spark plugs nationally, and none participates in factory

installation sales. They sell proprietary brand spark plugs primarily to jobbers and retail outlets located within a limited geographic area. The small spark plug manufacturers also produce private brand spark plugs for a variety of customers, primarily regional chain stores and discount houses. In a limited number of instances, such as the 'Atlas' spark plug which General Battery & Ceramic, Champion, and ELTRA produce for the Standard Oil Companies, private brand spark plugs are manufactured for broader geographic distribution. The independent manufacturers of spark plugs continue to operate in the same areas as they did before the acquisition—private branding and low-volume proprietary sales. For various reasons, none of the major vehicle manufacturers has ever given serious consideration to sourcing to any of these small spark plug manufacturers.

63. Ford purchases of Champion spark plugs from 1955 through 1965 were as follows:

Year	Original Equipment Units	Replacement Units	Total Units
	(000)	(000)	(000)
1955	22,579	18,080	40,659
1956	15,676	16,890	32,566
1957	17,005	19,004	36,009
1958	11,573	13,886	25,459
1959	16,756	18,475	35,231
1960	16,141	22,534	38,675
1961	6,839	6,459	13,298
1962	None	None	None
1963	None	None	None
1964	None	None	None
1965	None	None	None

Exhibit GF-1

64. The following table shows installation of spark plugs as original equipment on vehicles produced by Ford Motor Company during 1955-1964.

ORIGINAL EQUIPMENT SPARK PLUGS INSTALLED IN:

Year	Cars	Trucks	Tractors	Total
	(000)	(000)	(000)	(000)
1955	17,490	2,776	267	20,533
1956	13,014	2,217	156	15,387
1957	14,639	2,480	159	17,278
1958	9,190	1,760	139	11,089
1959	13,091	2,372	131	15,594
1960	13,123	2,343	71	15,537
1961	11,797	2,324	60	14,181
1962	13,978	2,563	82	16,623
1963	14,653	2,926	115	17,694
1964	16,065	3,224	71	19,360

65. The following table shows unit sales of replacement spark plugs through the various Divisions and Operations of Ford Motor Company during 1955-1964.

REPLACEMENT SPARK PLUGS SOLD BY:

Year	Ford Division Units	Lincoln-Mercury Division Units	Tractor Operations U.S. Units	Autolite Division Units	General Parts Division Units
	(000)	(000)	(000)	(000)	(000)
1955	16,211	1,982	775	—	—
1956	14,498	2,061	582	—	—
1957	15,365	1,495	538	—	—
1958	12,700	1,597	411	—	—
1959	18,613	1,049	812	—	—
1960	20,075	—	795	—	—
1961	17,580	—	761	28,975	1,445
1962	15,036	—	578	49,090	3,343
1963	15,479	—	709	48,486	2,758
1964	18,356	—	531	51,981	2,678

Exhibit GF-1

66. The following table shows the total export shipments of domestic spark plug manufacturers during 1955-1964:

TOTAL EXPORT SHIPMENTS

Year	Total (000)
1955	23,367
1956	23,371
1957	24,186
1958	23,069
1959	28,122
1960	27,996
1961	24,937
1962	29,440
1963	31,281
1964	32,487

67. The statistical data contained in paragraphs 51, 54, 56, and 60 have, for the most part, been submitted by the Companies concerned. Where actual data from the Companies concerned are unavailable, estimates based on Ford's Answer to Int. No. 14 have been used. Actual data for the years 1958-1960 which have thus far been received from Champion, AC, and Electric Autolite have confirmed the accuracy of the estimates in gross, although as anticipated there have been small changes within given years. The parties agree that the current series of figures is a reasonable approach to establishing both universe and company data. They further agree that these figures will be used at trial. However, the parties recognize that actual data may be received from Champion for the period 1961-1964, from AC for the period 1955-1957, from ELTRA for calendar years 1963-1964, or from the small manufacturers whose

gross combined production for the period 1955-1964 is estimated in paragraph 60. Therefore, the parties further agree that should any such actual data become available from the Companies concerned, such actual data shall be substituted for the estimated data in paragraphs 51 (Champion), 54 (AC), 56 (ELTRA), and 60 (small manufacturers), and appropriate universe adjustments shall be made in paragraphs 48 and 49. Such substitution and adjustment may be made at any time prior to September 15, 1966, and the resulting figures will then be used at trial.

68. For the purpose of this stipulation the terms shipments, market performance, and sales (which refer to statistics contained in paragraphs 48, 49, 51, 54, 56, 57, 59, 60, 61, 63, 65, and 66) are considered to be interchangeable.

Wright Tisdale
Attorney for Defendant
Ford Motor Company

Of Counsel:

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L. Homer Surbeck

Lawrence F. Noble
Attorneys for Department
of Justice

Jerome G. Shapiro

EXHIBIT G-1

[Conformed Copy]

AGREEMENT dated April 12, 1961 between THE ELECTRIC AUTOLITE COMPANY, an Ohio corporation (hereinafter called the Seller), and FORD MOTOR COMPANY, a Delaware corporation (hereinafter called the Buyer).

1. *Sale and Purchase of Certain Assets.* The Seller is selling to the Buyer, and the Buyer is purchasing from the Seller, at the purchase prices set forth in Section 2 hereof, by the delivery simultaneously herewith of bills of sale, deeds, assignments, endorsements and other instruments of transfer and conveyance, the following assets, properties and rights:

(a) All the tangible assets and properties of the Seller used in connection with the spark plug operations of the Seller located at Fostoria, Ohio, and the battery operations of the Seller located at Owosso, Michigan including, without limitation or exception, whether or not included in the lists referred to in the next to last paragraph of this Section, all land, land improvements (including railroad sidings, fences and interior streets), buildings and building equipment, machinery and equipment (including tools, dies, molds, furniture and fixtures and automotive equipment) and inventory, merchandise and materials (such tangible assets and properties being hereinafter called the Tangible Assets).

(b) All the patents, patent applications, licenses, inventions, discoveries, improvements, copyrights and similar technical data and property owned or held by the Seller throughout the world (including all agreements and the rights therein under which the

Exhibit G-1

Seller supplies technical assistance or licenses its patents and trade-marks) pertaining to spark plugs, batteries, and processes and equipment for their manufacture; except that the Seller reserves (i) all such patents, patent applications, licenses, inventions, discoveries, improvements, copyrights and similar technical data and property in Canada, Brazil and Venezuela (subject to a non-exclusive license thereunder to the Buyer and its subsidiaries in such countries), and (ii) a non-exclusive license thereunder for its use throughout the world, other than Canada, Brazil and Venezuela.

(c) The trade-mark and the trade name "AUTOLITE" (including, without limitation, all trade-marks and trade names associated therewith, such as "AL" and design, "Autolite Star", "Resistor", "Cavalier" and "Sta ful") and any variant thereof (all of such trade-marks and trade names and variants thereof being referred to herein as "Autolite", together with the good will pertaining thereto and all registrations and applications for registrations therefor; except that the Seller reserves such trade-marks and trade names for its exclusive use in Canada, Brazil and Venezuela, provided that devices bearing any such trade-mark, trade name or variant may be sold therein in vehicles made by the Buyer and its subsidiaries in other countries.

(d) All the business and good will of and pertaining to the Acquired Operations including, without limitation, all plans, manufacturing information and know-how, processing data, specifications and engineering drawings, designs, research data and other engineering information and materials owned by the Seller.

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(e) All the agreements and purchase orders between the Seller and its suppliers in effect at the date hereof entered into in the ordinary course of business and necessary for the normal conduct of the Acquired Operations, to the extent that performance thereunder has not been completed by such suppliers as of the date hereof.

(f) All the agreements between the Seller and tire companies, oil companies, national accounts, automotive and marine after market distributors and dealers, and all the unfilled portions of all orders from such companies, accounts, distributors and dealers, in effect on the date hereof entered into in the ordinary course of business and pertaining to the Acquired Operations, including, without limitation, agreements with battery distributors, battery jobbers, central distributors, central service stations, central service warehouses, service distributors, contractor accounts, dealers, distribution accounts, fleet owners, warehouse wire and cable distributors and warehouse spark plug distributors.

(g) All the prepaid expenses (excluding insurance expenses) pertaining to the Acquired Operations and to the other assets, properties and rights being sold simultaneously herewith.

(h) All the leases or agreements under which the Seller is lessor or lessee, in effect on the date hereof entered into in the ordinary course of business and pertaining to the Acquired Operations.

(i) All the advertising and promotional agreements or arrangements to which the Seller is a party in effect on the date hereof entered into in the ordinary course

of business and pertaining to the Acquired Operations.

(j) All the other agreements (other than agreements relating to employees and employee benefit plans) to which the Seller is a party in effect on the date hereof entered into in the ordinary course of business and pertaining to the Acquired Operations.

(k) All the Seller's rights against manufacturers and suppliers (including, without limitation, all rights in connection with such manufacturers' and suppliers' warranties and representations) with respect to raw materials, parts and any other materials and merchandise purchased by the Seller from such manufacturers and suppliers prior to the date hereof and being sold to the Buyer simultaneously herewith.

(l) All the customer lists, books and records pertaining to the Acquired Operations. Such books and records shall not include those relating to the Seller's general corporate affairs or to any properties of the Seller not being transferred to the Buyer but, in so far as any books and records so excluded shall relate to the Acquired Operations or to the properties, assets or rights being transferred to the Buyer, the Buyer shall have the right to examine the same at all reasonable times and to make copies or abstracts thereof; and in so far as any of the books and records being transferred to the Buyer shall, in the Seller's opinion, be material in connection with any tax or business problems or purposes of the Seller, the Seller shall have the right to examine the same at all reasonable times and to make copies or abstracts thereof.

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To the extent that the assignment of any of the above patents, patent applications, licenses, trade-marks, trade names, orders, agreements or leases shall require the consent of the other parties thereto, this Agreement shall not constitute an assignment or an agreement to assign the same if such action would constitute a breach thereof. The Seller will use its best efforts to obtain the consent of the other parties to the assignment thereof to the Buyer. If such consent is not obtained the Seller will cooperate with the Buyer in any reasonable arrangement designed to provide for the Buyer the benefits thereunder.

The sale of the Tangible Assets and all the other assets, properties and rights referred to in this Section (such Tangible Assets and such other assets, properties and rights being hereinafter sometimes called the Acquired Properties) is made free and clear of all liabilities, obligations, liens and encumbrances, except any imperfection of title, lien or encumbrance of the type specified in Section 5(b) hereof and except those liabilities and obligations which are hereby assumed by the Buyer as set forth in Sections 3 and 10 hereof. The Seller shall pay all transfer, sale, documentary or other taxes in connection with the sale of the Acquired Properties. The Buyer shall furnish the Seller with appropriate resale certificates for establishing exemptions from the Michigan and Ohio sales taxes and appropriate certificates for establishing exemptions from the Federal excise tax.

Nothing in this Agreement or the instruments of transfer referred to herein shall be construed as precluding the Seller from manufacturing and selling any product anywhere under a trade-mark or trade name other than those transferred as recited in paragraph (c) of this Section.

The Seller has delivered to the Buyer lists and brief descriptions of the items referred to in paragraphs (a),

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(b), (c), (e), (f), (g), (h), (i) and (j) (except for the exclusion of agreements entered into in the ordinary course of business for the purchase or sale of materials and products extending for a period of not more than one year from the date hereof and involving not more than $5,000 each) of this Section including, without limitation, all liabilities and obligations of the Seller in respect thereof, and represents and warrants that such lists and descriptions are substantially correct and complete as of the date hereof.

The Seller hereby agrees that, from time to time, at the Buyer's request and without further consideration, the Seller will execute and deliver such other instruments of conveyance and transfer and take such other action as the Buyer reasonably may require more effectively to convey, transfer to and vest in the Buyer, and to put the Buyer in possession of, the Acquired Properties.

2. *Purchase Prices.*

(a) The purchase prices for the Acquired Properties are as follows, payable by the delivery to the Seller simultaneously herewith of a certified or bank cashier's check to the Seller or its order in an amount equal to the aggregate of such prices:

Acquired Properties	Purchase Prices
Land	$ 80,000
Land Improvements, including railroad sidings, fences, and interior streets	$ 200,000
Buildings and Building Equipment	$ 3,000,000
Machinery and Equipment, including tools, dies, molds, furniture and fixtures and automotive equipment	$18,103,000
Inventory	$ 3,896,000*
Prepaid Expenses	$ 488,000*
License Agreements, Trade Marks and Patents	$ 250,000
Goodwill	$ 2,000,000

* Subject to adjustment as provided in paragraph (b) of this Section.

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(b) The Seller hereby agrees that it will cause Messrs. Touche, Ross, Bailey & Smart, the Seller's accountants, on or before May 31, 1961, to prepare and deliver to the Buyer and the Seller, respectively, a certificate, concurred in by Messrs. Lybrand, Ross Bros. & Montgomery, the Buyer's accountants (said two firms of accountants being hereinafter together called the Accountants), as to (i) the amount (at cost—principally first-in first-out method—or market, whichever is lower), as of the close of business on the date hereof of the inventory included in the Acquired Properties, and (ii) the amount as of the close of business on the date hereof of the prepaid expenses included in the Acquired Properties, the amounts of such inventory and prepaid expenses to be determined in accordance with generally accepted accounting principles applied on a basis consistent with those applied in the financial statements of the Seller referred to in Section 5(h) of this Agreement. In the event that said certificate shall show an inventory amount in excess of or less than the purchase price thereof as set forth in paragraph (a) of this Section, or shall show a prepaid expenses amount in excess of or less than the purchase price thereof as set forth in paragraph (a) of this Section, the Buyer shall promptly pay to the Seller the amount of any net excess owing, or the Seller shall promptly pay to the Buyer the amount of any net deficiency owing, as the case may be, such payment being by way of adjustment of the purchase prices for the inventory and prepaid expenses as set forth in paragraph (a) of this Section.

If the Accountants are unable to agree on such adjustments on or before May 31, 1961, such matter

shall be referred to a firm of independent public accountants of recognized standing selected by the Accountants for its prompt determination. The determination of such adjustments in the manner prescribed in this paragraph (b) shall be conclusive and binding upon the parties hereto and their successors and assigns.

3. *Assumption of Liabilities and Obligations by the Buyer.* The Buyer hereby assumes all the following liabilities and obligations of the Seller:

(a) All the Seller's obligations under agreements with and purchase orders issued to suppliers referred to in Section 1(e) hereof, provided that such obligations are stated in the agreements or purchase orders either specifically or by implication, and are to be performed subsequent to the date hereof in exchange for goods to be delivered or services to be performed by such suppliers subsequent to the date hereof.

(b) All the Seller's obligations under agreements and orders referred to in Section 1(f) hereof, provided that (i) such obligations are stated in such agreements or orders, either specifically or by implication, and are to be performed subsequent to the date hereof in exchange for benefits to be conferred or accruing subsequent to the date hereof, including obligations to grant mechandise credits or promotional awards to which distributors may become entitled subsequent to the date hereof in accordance with the terms and provisions of such agreements and orders then in effect consistent with the type and terms of obligations in effect during 1960, and (ii) notwithstanding anything to the contrary implied by the fore-

going, such obligations shall not include any with respect to the Seller's product warranties and adjustment policies except to the extent specified in paragraph (e) of this Section.

(c) All the Seller's obligations under the agreements and other items referred to in Sections 1(h) and 1(j), provided that such obligations are stated in such agreements and items, either specifically or by implication, and are to be performed subsequent to the date hereof in exchange for benefits to be conferred or accruing subsequent to the date hereof.

(d) All the Seller's obligations to be performed after the date hereof under the agreements and other items referred to in Section 1(i) or under the commitments in the amounts set forth in the list delivered to the Buyer pursuant to Section 1(i). The amounts which from January 1, 1961 to the date hereof the Seller in accordance with its regular classification of accounts has recorded as liabilities, and subsequently paid, for advertising and promotional expenses (excluding television and radio) shall, if not accepted by the Buyer, promptly be audited by the firms of accountants named in paragraph 2(b) who shall render their joint certificate to the Seller and Buyer as to the total thereof. If the amount so certified plus the sum of $200,000 paid by the Seller to the Buyer concurrently herewith shall exceed or be less than $616,000 (which the parties have agreed represents the Seller's fair share of such obligation for said period), the Seller shall pay to the Buyer any such deficiency or the Buyer shall refund to the Seller any such excess, as the case may be.

(e) All the Seller's liabilities and obligations under the adjustment policies (but not product warranties) referred to in Section 7(a) hereof, provided that (i) the Buyer shall not assume any liability or obligation under such adjustment policies except as to products sold by the Seller under the "Autolite" brand name, (ii) the Buyer shall not assume any liability or obligation in connection with claims for property damage or personal injury, and (iii) the Seller shall reimburse the Buyer for all amounts allowed, credited, rebated, discounted or paid in cash or in kind by the Buyer in connection with the liabilities and obligations hereby assumed by the Buyer under such adjustment policies up to and including the sum of $200,000.

The Buyer does not assume any of the above-mentioned liabilities or obligations if such liability or obligation, or the agreement or other item to which it relates, is not described in the lists submitted to the Buyer by the Seller pursuant to Sections 1 or 7 hereof.

Except as specifically provided in this Section and in Section 10 hereof, the Buyer does not assume any liability or obligation of the Seller of any nature whatever, whether or not of a type which is or should be recorded on the books of the Seller, and whether or not arising or accruing prior or subsequent to the date hereof.

4. *Indemnities.*

(a) The Seller hereby indemnifies and holds harmless the Buyer from and against any and all loss, cost, liability and expense arising out of or in connection with any and all liabilities and obligations of the Seller not expressly assumed by the Buyer, and any

and all liabilities and obligations of the Seller arising out of or resulting from the ownership of the Acquired Properties or the operation of the Acquired Operations prior to the date hereof, other than those liabilities and obligations assumed by the Buyer pursuant to Sections 3 and 10 hereof, and from all actions, suits, proceedings, demands, claims, assessments and judgments with respect to any of the foregoing.

(b) The Buyer hereby indemnifies and holds harmless the Seller from and against any and all loss, cost, liability and expense arising out of or in connection with any and all liabilities and obligations of the Seller assumed by the Buyer pursuant to Sections 3 and 10 hereof, and from all actions, suits, proceedings, demands, claims, assessments and judgments with respect to any of the foregoing.

5. *Certain Representations and Warranties by the Seller.* The Seller hereby represents and warrants as follows:

(a) The Seller is a corporation duly organized, validly existing and in good standing under the laws of the State of Ohio and is entitled to carry on the Acquired Operations and to own the Acquired Properties as and in the places where the Acquired Operations are now conducted and the Acquired Properties are now owned or operated. The copies of the Seller's Articles of Incorporation and Code of Regulations, certified by an officer of the Seller, which have been delivered to the Buyer, are correct and complete as of the date hereof.

(b) The Seller has good and marketable title to all the Acquired Properties, real and personal, free and

clear of all liens and encumbrances, except (i) liens for taxes and assessments not yet due and payable, and (ii) such imperfections of title and encumbrances, if any, as are not substantial in character, amount or extent, and do not materially detract from the value, or interfere with the present use, of the Acquired Properties subject thereto or affected thereby, or otherwise materially impair the Acquired Operations. The Seller has paid and will pay any and all federal income, manufacturers excise, withholding, federal insurance contributions act, federal unemployment and state unemployment taxes, license fees and other charges levied or imposed upon or in connection with the Acquired Operations or the Acquired Properties that are due and payable as of the date hereof, or that will become due and payable by reason of the operation of the Acquired Operations or the Acquired Properties by the Seller prior to the date hereof. The Seller has not received notice of any violation of any applicable zoning regulation, ordinance, or any other law, order, regulation or requirement relating to the Acquired Properties and, so far as known to the Seller, there is no such violation.

(c) The conduct of the Acquired Operations as now conducted, the use of the Acquired Properties as now used, and the products thereof do not infringe, so far as known to the Seller, any patent, trade-mark or trade name of another and the Seller has not received any notice of conflict with the asserted rights of others.

(d) There is no litigation, proceeding, governmental investigation or claim outstanding, pending, or so far as

known to the Seller, threatened, against the Acquired Operations or the Acquired Properties, except for suits or claims of a character incident to the normal conduct of the Acquired Operations or the Acquired Properties and involving not more than $10,000 in the aggregate, except as contained in List 5(d).

(e) To the best of the knowledge, information and belief of its officers, the Seller has complied with all laws, regulations and orders applicable to the Acquired Operations and the Acquired Properties.

(f) The consummation of the transactions contemplated hereby will not, to the best of the Seller's knowledge, information and belief, result in any breach of, or constitute a default under, any agreement or other instrument or obligation relating to the Acquired Operations or the Acquired Properties to which the Seller is a party or by which the Seller may be bound or affected, or result in the creation of any lien, charge or encumbrance upon any of the Acquired Operations or the Acquired Properties.

(g) The Seller as of the date hereof is not in material default, or alleged to be in material default, under any agreement, instrument or obligation relating to the Acquired Operations or the Acquired Properties. All parties with whom the Seller has agreements relating to the Acquired Operations or the Acquired Properties are in substantial compliance therewith and are not in material default thereunder.

(h) The Seller has heretofore delivered to the Buyer the consolidated balance sheet of the Seller and its subsidiary companies as of December 31, 1960, and the

related statements of earnings, retained earnings and additional paid-in capital for the year then ended, with the report thereon of Messrs. Touche, Ross, Bailey & Smart. All of such financial statements (including the related notes) are correct and complete and present fairly the consolidated financial position of the Company and its subsidiary companies as of December 31, 1960 and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Since December 31, 1960, there have been no changes in the assets or liabilities or financial condition of the Company or any of its subsidiary companies from that set forth in said balance sheet (and the related notes), other than changes in the ordinary course of business and other than the purchase of a lead smelting plant at Detroit, Michigan for approximately $1,000,000, the effect of which has not been materially adverse.

(i) The execution and delivery of this Agreement by the Seller, and the performance of the transactions contemplated hereby, have been duly and effectively authorized and approved by the Board of Directors of the Seller and no authorization or approval by the stockholders of the Seller is required.

6. *Certain Representations and Warranties by the Buyer.* The Buyer hereby represents and warrants as follows:

(a) The Buyer is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and is duly qualified to do busi-

ness and is in good standing in the States of Michigan and Ohio.

(b) The consummation of the transactions contemplated hereby will not result in any breach of, or constitute a default under, any agreement or other instrument or obligation to which the Buyer is a party or by which the Buyer may be bound or affected.

(c) The execution and delivery of this Agreement by the Buyer, and the performance of the transactions contemplated hereby, have been duly and effectively authorized and approved by the Board of Directors of the Buyer and no authorization or approval by the stockholders of the Buyer is required.

7. *Certain Additional Lists of Agreements and Personnel Data.* The Seller has delivered to the Buyer lists and brief descriptions of the following, including, without limitation, all liabilities and obligations of the Seller in respect thereof, and represents and warrants that such lists and descriptions are substantially correct and complete as of the date hereof:

(a) All the forms of product warranties and adjustment policies used by the Seller in connection with the Acquired Operations.

(b) All the pension and other employee benefit plans or arrangements relating to the Acquired Operations, including the tenth annual actuarial reports with respect to the Seller's Pension Plan and the Seller's UAW Pension Plan.

(c) All the collective bargaining agreements relating to the Acquired Operations.

(d) All the employees of the Seller associated with the the Acquired Operations whom the Seller will make available to the Buyer, as the Buyer may select, setting forth, in the case of salaried employees, their titles, departments to which they are now assigned, current rates of compensation, age and years of service and, in the case of hourly rate employees, their ages and years of service and the applicable work classifications, incentive base rates and straight time productive and non-productive rates.

(e) All the policies of fire, liability, business interruption and other forms of insurance relating to the Acquired Operations.

(f) All the outstanding workmen's compensation claims and cases relating to employees connected with the Acquired Operations.

8. *Further Agreements of the Seller.*

(a) The Seller hereby agrees, in connection with its spark plug operations, (i) to make available to the Buyer certain of the Seller's engineering, manufacturing, after market and foreign distribution personnel, as the Buyer may select, and (ii) to supply the Buyer with the books and records necessary for the proper conduct of such operations.

(b) The Seller hereby agrees, in connection with its battery operations, (i) to make available to the Buyer (A) certain of its plant personnel at Owosso, Michigan and (B) certain of its after market and foreign distribution personnel, as the Buyer may select, and (ii) to supply the Buyer with such books and records necessary for the proper conduct of such operations.

Exhibit G-1

(c) The Seller hereby agrees to supply the Buyer from the date hereof to April 12, 1964, on a reasonable fee basis to be agreed upon, with such engineering and technical services as the Buyer may reasonably request in connection with the battery operations at Owosso, Michigan.

(d) The Seller hereby agrees to supply the Buyer from the date hereof to October 12, 1961, on a reasonable fee basis to be agreed upon, with such operating services including services relating to temporary warehousing order processing, shipping, plant scheduling, accounting and payroll matters, as the Buyer may reasonably request in connection with the Acquired Operations and Acquired Properties.

(e) The Seller hereby agrees to act as receiving agent for all the Buyer's outstanding accounts receivable in connection with the Acquired Operations, provided that the Seller has no responsibility for the collection thereof or any other matter in connection therewith except for the exercise of reasonable care in the receipt and the transmission thereof to the Buyer.

9. *Further Agreements of the Buyer.*

(a) The Buyer hereby agrees to supply the Seller from the date hereof to April 12, 1964, on a reasonable fee basis to be agreed upon, with such engineering and technical services as the Seller may reasonably request in connection with (i) the spark plug operations of the Seller not being acquired by the Buyer, and (ii) the spark plug operations to be established by the Seller in the United States.

Exhibit G-1

(b) The Buyer hereby agrees to supply to or upon the order of the Seller such quantities and types of "AUTOLITE" brand (and any variant thereof) spark plugs and batteries as the Seller may require (i) to perform its obligations under its existing agreements with the original equipment manufacturers from the date hereof to the expiration of such agreements (including any renewals thereof which the Seller is obligated to grant), at the respective prices and times and on the other specifications, terms and conditions provided for in such agreements, and (ii) for sale to original equipment manufacturers, such products to be sold by the Buyer to the Seller upon terms and conditions, and at prices, generally competitive with those in the industry and mutually agreeable to the Buyer and the Seller.

(c) The Buyer hereby agrees to act as receiving agent for all the Seller's outstanding accounts receivable in connection with the Acquired Operations, provided that the Buyer has no responsibility for the collection thereof or any other matter in connection therewith except for the exercise of reasonable care in the receipt and the transmission thereof to the Seller.

(d) In the event that, upon any cancellations by the Seller of any insurance with respect to the Acquired Properties or the Acquired Operations, the Seller shall receive a refund of premium at less than the pro rata rate, the Buyer shall pay the Seller and difference between the amount thus received and the amount that would have been received at the pro rata rate.

Exhibit G-1

10. *Agreements Relating to Employees and Employee Benefit Plans.*

(a) *General; Liabilities and Obligations.* Except as expressly provided in this Section, the Buyer does not assume any liability or obligation of the Seller to its employees, whether under its collective bargaining agreements, personnel policies or otherwise. The Buyer shall not be responsible for any liability arising out of the Seller's employment of any person including, without limitation, any workmen's compensation liability and any liabilty under the Federal Insurance Contributions Act, the Federal Unemployment Tax Act, or any state unemployment tax law. With respect to any workmen's compensation liability of the Buyer that shall arise in the period from the date hereof to April 12, 1963 as a result of continued exposure during successive employment by the Seller and the Buyer, the Seller shall reimburse the Buyer therefor in the proportion that the period of exposure while employed by Seller bears to the total period of exposure.

(b) *Pension Plans.*

(i) *Obligation for Persons Already Retired and Deferred Termination Benefits.* All retirement benefits (including, without limitation, normal, early, incapacity or deferred termination retirement benefits) for persons who as of the date hereof have retired or applied for (and are entitled to) retirement benefits under the Seller's "UAW Pension Plan" and the Seller's "Pension Plan" (which covers salary and certain other employees not covered by the Seller's UAW

Pension Plan and which hereinafter is referred to as the "Seller's Pension Plan"), and all deferred termination benefits under either of such plans for persons whose service with the Seller shall not be recognized for benefit purposes under a retirement plan of the Buyer, shall remain an obligation of the Seller under its appropriate retirement plan.

(ii) *Provisions Regarding the Seller's Pension Plan.* The Buyer shall amend its General Retirement Plan to admit employees of the Seller (including those on layoff and those on leave of absence) as of the date hereof who are covered by the Seller's Pension Plan and who within six months thereafter become employees of the Buyer, to membership in Buyer's Plan with such creditable service thereunder as shall be generally comparable to their creditable service as of the date hereof under the Seller's Pension Plan; provided, however, that such amendment shall not become effective unless and until there shall have been a transfer from the trust under the Seller's Pension Plan to the Trustee under the Buyer's General Retirement Plan of that portion of the sum of the assets of such trust and any other amount funded (including, without limitation, the value of all annuities and all funds held for the purchase of annuities) under the Seller's Pension Plan as is allocable on an actuarial basis, as determined below, to such employees, and unless and until appropriate Internal Revenue Service rulings satisfactory to the Buyer shall have been received assuring Buyer, among other

things, of its right to deduct contributions made by it with respect to such service.

Determination of the portion of assets to be so transferred shall be made as of the date hereof by a qualified actuary selected by the Seller, subject to review and concurrence by a qualified actuary selected by the Buyer. In making such determination, the portion of the assets of the trust under the Seller's Pension Plan to be transferred to the trustee under the Buyer's General Retirement Plan shall bear the same percentage relationship to the sum of the total of the assets of the trust plus all other amounts funded (including, without limitation, the value of all annuities and all funds held for the purchase of annuities) under the Seller's Pension Plan as (a) the amount of accrued liabilities under the Seller's Pension Plan, immediately prior to the date hereof, for all employees of the Seller admitted to membership under the General Retirement Plan of the Buyer bears to (b) the amount of accrued liabilities under the Seller's Pension Plan, immediately prior to the date hereof, for all employees and other persons under the Seller's Pension Plan, including persons referred to in paragraph (b)(i) of this section. If the actuary selected by the Buyer does not concur in the proposed determination of the actuary selected by the Seller, such actuaries shall select a third actuary who, after taking into account the findings of the other two actuaries, shall make such determination.

The Seller shall take such action as is necessary or appropriate to cause the transfer of the

assets and other amounts described above. As a condition to the Seller's obligation to cause such transfer, it is recognized that Seller requires the approval of the trustee under the Seller's Pension Plan to such transfer and an appropriate Internal Revenue Service ruling satisfactory to the Seller assuring Seller, among other things, of its right to deduct contributions to be made by it under its amended plan. Notwithstanding anything in this paragraph, it shall be in the sole discretion of the Buyer as to whether or not the Buyer shall recognize such service with respect to any such employees represented by a collective bargaining representative; and further, any recognition of such service and any transfer of assets with respect to such employees shall be subject to appropriate agreements or arrangements being made with the collective bargaining representative satisfactory to the Seller and/or Buyer, as the case may be.

(iii) *Provisions Regarding the Seller's UAW Pension Plan.*

If and to the extent provision is made in a retirement plan of the Buyer for recognizing service with the Seller for all or any of the Seller's employees (including those on layoff and those on leave of absence) at the date hereof who are covered by the Seller's UAW Pension Plan as creditable service under such retirement plan of the Buyer, the Seller shall use its best efforts to cause to be transferred from the trust under the Seller's UAW Pension Plan to the appro-

priate trust or trusts under such retirement plan of the Buyer that portion of the assets of the trust and any other amount funded (including, without limitation, the value of all annuities and all funds held for the purchase of annuities), under the Seller's UAW Pension Plan as is allocable on an actuarial basis, as determined below, to the employees for whom such creditable service is recognized. Determination of the portion of assets to be so transferred shall be made as of the date hereof by a qualified actuary selected by the Seller, subject to review and concurrence by a qualified actuary selected by the Buyer. In making such determination, the total amount of assets under the Seller's UAW Pension Plan to be transferred to the trustee under the aforementioned retirement plan of the Buyer shall bear the same percentage relationship to the sum of the total assets of the trust plus all other amounts funded (including, without limitation, the value of all annuities and all funds held for the purchase of annuities) under the Seller's UAW Pension Plan as (a) the amount of accrued liabilities under the Seller's UAW Pension Plan, immediately prior to the date hereof, for all employees of the Seller admitted to membership under such retirement plan of the Buyer bears to (b) the amount of accrued liabilities under the Seller's UAW Pension Plan, immediately prior to the date hereof, for all employees and other persons under such Pension Plan, including persons referred to in paragraph (b)(i) of this section. If the actuary

selected by the Buyer does not concur in the proposed determination of the actuary selected by the Seller, such actuaries shall select a third actuary who, after taking into account the findings of the other two actuaries, shall make such determination.

Any amendment to a retirement plan of the Buyer providing for recognition of creditable service of employees covered by the Sellers' UAW Pension Plan shall be effective only after the transfer of assets described above shall have been made, and after appropriate Internal Revenue Service ruling satisfactory to the Buyer shall have been received assuring the Buyer, among other things, of its right to deduct contributions made by it with respect to such service. As a condition to the Seller's obligation to cause such transfer of assets, it is recognized that the Seller may require the execution of such agreements with the collective bargaining representative of such employees, including such amendments of the Seller's UAW Pension Plan, and such Internal Revenue Service rulings as may be appropriate and satisfactory to the Seller.

(iv) ***The Seller's Retirement Plan for Salaried Employees.***

The Seller agrees to use its best efforts to make appropriate arrangements to provide Seller's employees who are "Participants" as of the date hereof under the Seller's "Retirement Plan for Salaried Employees" (which provides supple-

mental non-contributory retirement benefits for certain salaried employees and is a plan separate and apart from the Seller's Pension Plan) and who subsequently become employees of the Buyer, with retirement benefits in accordance with the benefits under such Plan based upon employment with the Seller.

(v) *Limitation on Termination of the Seller's Plans.* The Seller shall not exercise, except with the Buyer's consent, any right of election that it might have to terminate or partially terminate the Seller's Pension Plan in its application to Seller's employees under such plan who thereafter become employees of Buyer; provided that, if any group of such employees is represented by a collective bargaining representative and the condition regarding agreements and arrangements with such representative contained in paragraph (b)(ii) of this section shall not have been concluded by April 12, 1962, or such later date as the parties may fix by agreement (which agreement shall not be unreasonably withheld), the Seller may exercise its right to terminate such plan with respect to such group of employees; and provided further, that the Seller may exercise its right to terminate such plan with respect to such employees if Seller is unable to obtain the consent of the trustee to the transfer of assets and an appropriate ruling from the Internal Revenue Service by April 12, 1962, or such later date as the parties may fix by agreement (which agreement shall not be unreasonably withheld). The Seller shall not exercise, except

with the Buyer's consent, any right of election that it might have to terminate or partially terminate the Seller's UAW Pension Plan prior to October 12,.1961 in its application to Seller's employees under such Plan who thereafter become employees of the Buyer; provided, however, that if an appropriate agreement is made by Buyer, prior to October 12, 1961, with the collective bargaining representative of the employees covered by such plan who shall have become employees of the Buyer providing for recognition of service with Seller under a retirement plan of the Buyer in accordance with paragraph (b)(iii) of this section, then the Seller shall not exercise such right of election unless by April 12, 1962, or such later date as the parties may fix by agreement (which agreement shall not be unreasonably withheld) the appropriate Internal Revenue Service rulings have not been obtained and the transfer of the trust assets from the Seller's UAW Pension Plan to such retirement plan of the Buyer has not been made.

(c) *SUB Plans.* If and to the extent that the Buyer makes provision under a Supplemental Unemployment Benefit Plan (hereafter called "SUB Plan") recognizing service with the Seller for the Seller's employees (including those on layoff and those on leave of absence) as of the date hereof who thereafter become employees of the Buyer, the Seller (without waiving any of its rights under its SUB Plan) shall use its best efforts to cause to be transferred to the trust under the Buyer's SUB Plan that portion of the assets of the trust under the Seller's SUB Plan

as is allocable as of April 12, 1961 to such employees, such allocation being determined in general on the basis of the ratio between the credit units credited to such employees to those credited to all employees under the Seller's SUB Plan; provided, however, that no such transfer shall be made unless Seller shall have obtained approval by the UAW-AFL-CIO of any necessary amendment of its SUB Plan and favorable rulings from the Internal Revenue Service and the United States Department of Labor. The assets, if or when transferred, shall be adjusted appropriately by the amount of any benefits that shall have been paid under the Seller's SUB Plan to such employees after the date hereof. The Seller shall not terminate its SUB Plan with respect to either its Owosso or Fostoria plants prior to October 12, 1961, except with the consent of the Buyer. If terminated, Seller's SUB Plan shall be deemed terminated as of April 12, 1961.

(d) *Insurance Programs.* With respect to the Seller's active employees as of the date hereof, the Seller represents that insurance coverage under its programs is provided for periods specified in the policies after the date hereof. The Seller shall use its best efforts to make such arrangements for extending the period of coverage for such employees who become Buyer's employees upon the date hereof, if so requested by the Buyer. The Buyer shall reimburse the Seller for the costs incurred by it in providing such insurance coverage subsequent to the date hereof. The Seller shall continue arrangements permitting its employees on layoff or leave of absence immediately prior to the date hereof to continue

coverage under the Seller's present insurance programs for the period provided thereunder, with the Seller and its employees continuing to pay the full cost thereof.

(e) *Vacation Pay.* The Seller shall pay, directly to hourly employees of the Seller at the date hereof who thereafter become employees of the Buyer, the amounts of all vacation benefits accrued in the calendar year 1960 for 1961 vacations of such employees. The Seller shall pay to the Buyer an amount which shall be in the same proportion to the amount of vacation benefits that would have accrued for such employees for 1962 vacations if they had remained in the employ of the Seller through December 31, 1961 as 102 days bears to 365 days.

(f) ***Employment with the Buyer.*** References in this Agreement to "employment with the Buyer," "becoming employees of the Buyer," and similar terms shall not be deemed to preclude the Buyer from providing that such persons who do not accept regular employment by signing the Buyer's usual forms shall not be deemed to be referred to by such references and shall be deemed to have been temporary employees of the Buyer during the period immediately subsequent to this Agreement.

11. *Proration of Certain Property Taxes.* The Seller and the Buyer hereby agree that ad valorem property taxes on real property included in the Acquired Properties, and on machinery and equipment included in the Acquired Properties for use, as such, by the Buyer, assessed as of the Tax Day next preceding the date hereof, shall be prorated as follows: the Seller shall bear the expense of such

taxes in the ratio that the number of days of the current calendar year to and including the day prior to the closing bears to 365; the Buyer shall bear the balance of said taxes. The Buyer shall remit all such taxes prior to delinquency. The Seller agrees to reimburse the Buyer for the Seller's prorated share, as aforesaid, promptly upon receipt of a billing therefor accompanied by a proper proration schedule. No other property taxes shall be prorated.

12. *Expenses.* Each party shall pay its own expenses incident to the preparation and carrying out of this Agreement and the transactions contemplated hereby including, without limitation, all fees of its counsel, accountants and actuaries; provided that if any matter is referred for determination to an accounting firm (as provided in Section 2 hereof), or to an actuarial firm (as provided in Section 10 hereof), the Buyer and the Seller will each pay one-half of the respective fees of such firms in connection therewith.

13. *Brokers.* Each party to this Agreement represents and warrants that no broker or finder has acted for it in connection with this Agreement or the transactions contemplated hereby and that no broker or finder is entitled to any brokerage or finder's fee or other commission in respect thereof based in any way on agreements, arrangements or understandings made by it; and each party to this Agreement agrees, with respect to any claim for any such brokerage or finder's fee or other commission based in any way on any agreement, arrangement or understanding made or alleged to have been made by it, to indemnify and hold harmless the other party hereto.

14. *Survival of Representations and Warranties.* All covenants, agreements, representations and warranties made herein, and in the bills of sale, deeds, assignments

and other instruments of transfer and conveyance being delivered simultaneously herewith (and all statements contained in any certificate or other instrument delivered by the Seller to the Buyer hereunder shall be deemed to constitute representations and warranties made by the Seller), shall survive the execution and delivery of this Agreement and the execution and delivery of all such other documents.

15. *Assignment.* This Agreement shall not be assignable by either party. Nothing in this Agreement, express or implied, is intended to confer upon any person, other than the parties hereto and their successors and assigns, any rights under or by reason of this Agreement.

16. *Definitions.*

(a) For purposes of this Agreement,

(i) The term "Acquired Operations" shall mean (i) all spark plug operations of the Seller carried on at Fostoria, Ohio, (ii) all battery operations of the Seller carried on at Owosso, Michigan, (iii) all operations (except Niagara Falls warehouse) of the Seller carried on at other locations and directly related to or connected with (i) or (ii) above as distinct from other operations, and (iv) all aftermarket distribution operations of the Seller, wherever carried on (except Canada, Brazil, Venezuela), of spark plugs and batteries under the name "Autolite", and of electrical parts, wire and cable.

(ii) The term "after market" shall not include original equipment or private brand business;

(iii) the term "battery" shall mean all batteries manufactured by the Seller other than industrial and aircraft batteries;

(iv) the term "the date hereof" shall mean [11:00] P.M., Eastern Standard Time, April 12, 1961;

(v) the term "subsidiary" shall mean, with respect to the Buyer, any corporation a majority of the voting stock of which is owned or controlled, directly or indirectly, by the Buyer.

(b) For purposes of Sections 1(f), 3(b), 3(d), and 7(a) of this Agreement, the term "the Seller" shall mean The Electric Autolite Company and its wholly-owned subsidiary, Autolite Export Company, Inc.

17. *Governing Law.* This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Michigan.

IN WITNESS WHEREOF the parties hereto have duly executed this Agreement on the date first above written.

ATTEST:

/s/ F. J. KENNEDY
Secretary

THE ELECTRIC AUTOLITE COMPANY

By /s/ R. H. DAVIES
President

ATTEST:

/s/ JOHN A. MOEKLE
Assistant Secretary

FORD MOTOR COMPANY

By /s/ Irving A. Duffy
Vice President

EXHIBIT G-2

PURCHASE PARTS AGREEMENT

THIS AGREEMENT made this 12th day of April, 1961, by and between THE ELECTRIC AUTO-LITE COMPANY, an Ohio corporation, with principal offices at 1100 Champlain Street, Toledo, Ohio (hereinafter referred to as Electric), and FORD MOTOR COMPANY, a Delaware corporation, with principal offices at The American Road, Dearborn, Michigan (hereinafter referred to as Ford),

WITNESSETH:

WHEREAS, Electric desires to sell to Ford, and Ford desires to purchase from Electric, spark plugs, batteries, battery components, electrical, and other parts for motor vehicles, and

WHEREAS, Ford desires to offer to sell to Electric, and Electric may elect to purchase from Ford, certain materials and components for use in the manufacture of spark plugs,

NOW, THEREFORE, in consideration of the premises and the covenants hereinafter set forth, the parties hereto agree as follows:

SPARK PLUGS

1. *Quantity.* Electric shall sell to Ford, and Ford shall purchase from Electric, during a period of two years from the date subsequent to the date of this agreement when Electric shall be able to supply spark plugs within the continental limits of the United States to Ford, such date in no event to be later than January 1, 1962, a quantity of not less than 12 million spark plugs. Spark plugs shall be of such types, models or part numbers as shall be selected by Ford from among the types, models and part numbers that Electric is manufacturing or selling for original equipment or service replacement purposes on the date of this agree-

ment or shall manufacture or sell for such purposes at any time during such period, or as shall be described in designs and specifications issued by Ford to Electric.

2. *Prices.* The price of each standard spark plug purchased by Ford shall be 33.4¢. The price for each resistor spark plug purchased by Ford shall be 46¢. Such prices include the cost of packaging, handling and shipment by Electric, f.o.b. Electric's plant. Applicable excise taxes are not included in the above prices, and shall be billed separately.

3. *Delivery.* Spark plugs shall be delivered to Ford, f.o.b. Electric's plant, in accordance with purchase orders and shipping releases issued by Ford from time to time; provided, however, that Electric shall not be required to deliver spark plugs at a rate in excess of its reasonable ability to manufacture or provide same or if to do so would impair its ability to supply its other customers.

4. *Ceramics and Other Spark Plug Components.* Ford shall offer to sell to Electric, during the period described in paragraph 1 above, such quantities of ceramics and other components for the manufacture of spark plugs as Electric may elect to purchase, but Ford shall not be required to supply in excess of such quantities of ceramics or other components as may be required to produce 25 million spark plugs a year. Prices shall be established by mutual agreement at the beginning of the two-year period described in paragraph 1 on the basis of Ford's manufacturing costs at its plant at Fostoria, Ohio (i.e. exclusive of all division and central staff assessments, and selling and advertising costs) projected over the first year of sales by Ford to Electric, plus 15% of such costs. Such prices may be revised annually thereafter to reflect only such cost differences as shall

be due to changes in the cost of direct labor and material. Ford shall deliver such ceramics and other spark plug components packed and ready for shipment, f.o.b. Ford's plant, Fostoria, Ohio.

BATTERIES

5. *Quantity.* Electric shall sell to Ford, and Ford shall purchase from Electric, approximately 45% of Ford's total requirements of batteries for production and service in each of its 1962, 1963 and 1964 model years; provided, however, that Ford shall not be in breach of its obligation to purchase such percentage if, in good faith, prior to the beginning of each model year it establishes a sourcing pattern which contemplates the purchasing of such percentage from Electric but, during such model year, alters such pattern on account of market conditions beyond its control; and provided further, that any batteries purchased by Ford from Electric for resale to other manufacturers of motor vehicles shall not be deemed to be included in Ford's total requirements described above or subject to the pricing provisions of paragraph 6 hereof.

a. Batteries purchased by Ford from Electric during the 1962 model year for use as original equipment in passenger cars, trucks and buses manufactured by Ford shall be selected by Ford from among those identified by part number on the attachments to Electric's quotation of March 10, 1961; batteries purchased by Ford from Electric during the 1962 model year for resale as service batteries through authorized passenger car or truck dealerships of Ford shall be selected by Ford from among those identified by part number on the attachments to Electric's quotation of March 16, 1961.

b. Batteries purchased by Ford from Electric during the 1962 model year for resale as service batteries through other than passenger car and truck dealerships of Ford shall be selected by Ford from among types and models Electric is now offering to its other customers or as described in designs and specifications issued by Ford to Electric.

c. Batteries purchased by Ford from Electric during the 1963 and 1964 model years shall be selected by Ford from among types and models Electric is then offering to its other customers or as described in designs and specifications issued by Ford to Electric.

6. *Prices.*

a. The prices for batteries purchased by Ford from Electric during the 1962 model year for use as original equipment in passenger cars, trucks and buses manufactured by Ford or for resale as service batteries through authorized passenger car or truck dealerships of Ford shall be the prices shown in the letters of quotation and attachments thereto referred to in paragraph 5 a above, with appropriate adjustments for lead and antimony averages as described therein.

b. The prices for batteries purchased by Ford from Electric during the 1962 model year for resale as tractor service batteries through authorized tractor distributorships of Ford shall be as established by negotiation between Electric and Ford at the prices at which Ford could purchase such batteries from any qualified competitive source.

c. The prices for batteries, other than those referred to in paragraphs a and b above, purchased by Ford from Electric from the date hereof through the 1962 model year

shall be established at amounts 5% above the prices for service batteries of equivalent design and specifications described in paragraphs a and b above, and shall be f.o.b. Electric's plant. In the absence of any service battery of equivalent design and specifications the prices of such batteries shall be established on the basis of the price of the service battery most nearly similar in design and specifications, adding 5%, and equitably adjusting the sum to reflect the difference in Electric's cost of manufacture due to the difference in design and specifications. In computing the difference in its cost of manufacture Electric shall apply the same accounting principles and give the same effect to the elements of cost as observed in computing the cost of such service batteries.

d. The prices for batteries purchased by Ford from Electric during the 1963 and 1964 model years for use as original equipment or service in motor vehicles manufactured by Ford or for resale as service batteries through authorized motor vehicle distributorships or dealerships of Ford shall be established by negotiation between Electric and Ford prior to the commencement of each respective model year, at the prices at which Ford could purchase such batteries from any qualified competitive source.

e. The prices for batteries other than those referred to in paragraph d above purchased by Ford from Electric during the 1963 and 1964 model years shall be established by negotiation between Electric and Ford immediately following the establishment of the prices for production batteries for the respective model years, at the prices at which Ford could purchase service batteries of equivalent design and specifications from any qualified competitive source. In the absence of any service battery of equivalent design

and specifications the prices of such batteries shall be established on the basis of the price of the service battery most nearly similar in design and specifications, and equitably adjusting it to reflect the difference in Electric's cost of manufacture due to the difference in design and specifications. In computing the difference in its cost of manufacture Electric shall apply the same accounting principles and give the same effect to the elements of cost as observed in computing the cost of such service batteries.

7. *Delivery.* Batteries shall be delivered by Electric to Ford in accordance with purchase orders and shipping releases issued by Ford from time to time.

8. *Battery Components.* Electric shall offer to sell to Ford, and Ford may, at its option, purchase from Electric, such of Ford's requirements of battery separators, covers and containers from the date hereof through its 1964 model year for its Owosso plant as Ford may determine, subject to maximum quantities of 900,000 containers with covers in each model year. Prices shall be established by mutual agreement promptly after the date hereof for the remainder of Ford's 1961 model year and its 1962 model year on the basis of Electric's manufacturing costs at its plant at Niagara Falls, New York (i.e. exclusive of all divisions and central staff assessments, and selling and advertising costs) projected over the 1962 model year, plus 15% of such costs. Such prices may be revised annually thereafter to reflect only such cost differences as shall be due to changes in the cost of direct labor and material. Electric shall deliver such items packed and ready for shipment, f.o.b. Ford's plant, Owosso, Michigan.

9. *Extension.* Upon completion of the 1963 model year Ford shall give due consideration to a proposal by Electric

to continue beyond the 1964 model year a contractual relationship with respect to batteries on a mutually satisfactory basis.

ELECTRICAL PARTS

10. *Quantity.* Electric shall sell to Ford, and Ford shall purchase from Electric, for a period of three years from the date of this agreement, Ford's requirements for resale in the after market of electrical and other parts, components and assemblies listed on Attachments A and B hereto that are now being manufactured (or that replace such items previously manufactured) by Electric for original equipment and service for manufacturers of motor vehicles, for 1961 and prior model years. Except with respect to the use of the brand name "Autolite", this provision shall not be construed as depriving Electric, in any way, of the right to continue to supply similar items to others.

11. *Prices.* Ford shall pay Electric for such electrical and other parts, components, and assemblies net prices (f.o.b. Electric's plant of manufacture and including packaging and excise tax) as follows:

a. For purchases made by Ford during the first year following the date of this agreement, such net prices with respect to items listed on Attachment A shall be 20% of the list prices shown thereon, and with respect to the items listed on Attachment B, shall be 72% of the warehouse distributor net prices shown thereon, as such Attachments may be amended by any supplements thereto issued by Electric and delivered to Ford prior to the execution of this agreement. The prices herein provided for items with copper content shall be subject to adjustment quarterly in respect to the amount of copper contained therein, to reflect changes

in the Connecticut Valley market price of copper, as published in "The American Metal Market", or such other publication as may be mutually agreed upon.

b. For purchases made by Ford during the second year following the date of this agreement, the net prices shall be the net prices described in paragraph a, with such adjustments as may be mutually agreed on at the start of such year to remedy any inequity to either party based upon events occurring subsequent to the date of this agreement.

c. For purchases made by Ford during the third year following the date of this agreement, the net prices shall be the net prices determined pursuant to paragraph a, with such adjustments as may be mutually agreed on at the start of such year to remedy any inequity to either party based upon events occurring subsequent to the date of this agreement.

GENERAL

12. *Definition.* The term "motor vehicles" shall mean passenger cars, trucks, buses, agricultural and industrial tractors, and marine and industrial equipment.

13. *Supersession of Purchase Order Terms.* The provisions of this agreement supersede the terms and conditions printed on the reverse side of the purchase orders issued by Ford or Electric for items purchased hereunder.

14. *Inspection.* All supplies sold by either party to the other hereunder shall be subject to inspection and test at destination. In case any such supplies are defective in material or workmanship or otherwise fail to meet the requirements of this agreement, the purchaser shall have the right to reject such supplies. Rejected supplies will be returned to the selling party at its risk for credit, and the

selling party shall pay the purchaser for all packing, handling, sorting and transportation expenses incurred in connection with the rejected supplies.

15. *Warranty.*

a. Electric warrants that each spark plug, battery and electrical and other part, component or assembly sold hereunder shall conform to the specifications, drawings, samples or other data described in purchase orders issued by Ford, will be fit and sufficient for the purpose intended, merchantable, of good material and workmanship and free from defects.

b. If any of Electric's competitors extend to Ford additional warranty undertakings such factor shall be taken into consideration in determining the competitiveness of prices previously referred to herein.

c. Ford warrants that each ceramic and other spark plug component sold hereunder shall conform to the specifications, drawings, samples or other data described in purchase orders issued to Ford, will be fit and sufficient for the purpose intended, merchantable, of good material and workmanship and free from defect.

16. *Patent Indemnity.*

a. Electric warrants that the spark plugs, batteries, electrical and other parts, components and assemblies sold hereunder (and their sale or use, alone or in combination, according to electric's specifications or recommendations, if any) will not infringe any United States or foreign patents; and Electric agrees to indemnify and hold harmless Ford and anyone selling or using such supplies against all judgments, decrees, costs and expenses resulting from any alleged infringement, and agrees that Electric shall, upon

request of Ford and at Electric's expense, defend or assist in the defense of any action which may be brought against Ford or those selling or using any of such supplies by reason of any such alleged infringement.

b. Electric hereby grants to Ford a license to repair, rebuild, and to have repaired and rebuilt, the supplies purchased by Ford under this agreement.

17. *Excusable Causes.* Neither party shall be liable for delays or failure in performing hereunder due to causes beyond its control or without its fault or negligence, or due to any obligation of Electric to supply spark plugs to its other customers. A party anticipating or experiencing such delay or failure to perform hereunder shall give immediate notice thereof in writing to the other party. In the event of an excusable delay or failure of performance by one party, the other party shall be entitled to obtain elsewhere for the duration of such delay or failure the supplies which it has agreed to purchase hereunder, and to reduce *pro tanto,* and without any obligation the quantity or amount of supplies which it is committed to purchase under this agreement.

18. *Changes.*

a. Ford may at any time, by written change order, make changes in

1. the drawings, designs and/or specifications for the supplies covered by this agreement,
2. the method of shipment and packing, and/or
3. the place of delivery.

b. If any such changes affect the time for performance, or the cost of manufacturing or delivering such supplies, Ford

shall make an equitable adjustment in the purchase price or the delivery schedule, or both.

19. *Nonassignment.* This agreement shall not be assigned by either party without the written consent of the other.

IN WITNESS WHEREOF, the parties hereto have executed this agreement in duplicate on the date first above written.

THE ELECTRIC AUTO-LITE COMPANY

_____

Attest:

_____

FORD MOTOR COMPANY

_____

Attest:

_____

EXHIBIT G-3

September 13, 1960

To: Mr. I. A. Duffy
Mr. R. S. McNamara
Mr. T. O. Yntema

Subject: Spark Plug and Battery Operations

In accordance with your request, the Business Planning Office has developed projections of the probable sales, profits and returns on spark plug and battery operations designed to supply the Company's present production and service requirements. Also included are estimates of the profits that could be earned if Ford participated in a portion of the replacement market not served by our franchised dealers.

These projections are, for the most part, based on data obtained in the Mars study. We believe these projections reflect the results that could be obtained on a going basis assuming present competitive cost-price relationships.

[During discussions prior to the acquisition, Electric Autolite Company was sometimes referred to as O'Leary or Mars Corporation.]

Spark Plugs

Projected average annual sales, profits and returns on spark plug operations to meet Ford's present requirements are detailed in Exhibit I and summarized as follows:

Sales (35.5 million units)	$8,183,000
Net Profit, Before Taxes	1,367,000
Average Return on Assets Employed, After Taxes	13.9%
Investment:	
Fixed Assets	$4,500,000
Total Assets Employed (Ford conventions with fixed assets at 50% of gross)	4,730,000

Exhibit G-3

It has been assumed that the spark plug machining and assembly operations would be located in the Sandusky Plant and the ceramics operation at Mt. Clemens or Sandusky. The estimate for fixed assets, therefore, does not include land or buildings. Projected profits are on an accounted basis; average incremental profits to the Company should be approximately $500,000 higher because of savings in overhead by establishing this operation in an existing plant.

As is shown in Exhibit I, if Ford could obtain 5% of the replacement spark plugs that are sold through outlets other than automobile dealers, total sales of spark plugs would be $13.4 million, profits $3.7 million and the return, 24.3%. It has been assumed that half of the Motorcraft replacement sales would be at a 30¢ price to oil and tire companies and private brand outlets and the balance to wholesalers and jobbers. Selling and advertising expenses on Motorcraft sales have been estimated equal to Mars', which sells spark plugs and batteries to wholesalers and jobbers.

If Ford could obtain 10% of the replacement market for spark plugs, total sales (including present production and P & A requirements) would be $18.7 million, profits $5.6 million and the return on assets, 26.7%. At this level of sales, Ford's total replacement sales would be somewhat less than Mars' present total replacement sales; replacement sales other than P & A would be about 50% of Mars' present replacement sales.

Start-up costs for spark plug operations (assuming split sourcing for an interim period) are estimated at $1-$2 million. Additional start-up costs for developing Motorcraft sales in the replacement market would probably be an additional $1-$2 million, depending on other products included

in Motorcraft, type of distribution, level of initial advertising, etc.

Batteries

Projected sales, profits and returns on battery operations for Ford's present requirements are as follows (details in Exhibit II):

Sales (2.4 million units)	$18,975,000
Net Profit, Before Taxes	813,000
Average Return on Assets Employed, After Taxes	4.2%
Investment:	
Fixed Assets	$ 8,285,000
Total Assets Employed (Ford conventions with fixed assets at 50% of gross)	9,038,000

These projections are based on seven battery plants, which we consider the optimum number from a freight penalty standpoint.

We have also estimated the costs and profits of one plant in the Detroit area which could advantageously supply about one-third of Ford's present requirements. As is shown in Exhibit II, the return on such a plant is projected at 3.1%, or somewhat less than for the seven plant system.

If it is assumed that a Motorcraft operation could obtain a 5% penetration of the battery industry (not including automotive P & A sales), total battery sales would be $33.9 million, profits $1.6 million and the return after taxes, 4.5%. Under this alternative, we have assumed that half of the Motorcraft replacement sales would be to wholesalers and jobbers and the balance to oil and tire companies

and private brand outlets. At a 10% penetration of the replacement market, total battery sales (including Ford's present requirements) would be $48.7 million, profits $2.9 million and the return after taxes, 5.5%.

It is estimated that start-up costs for one plant in the Detroit area would be about $500,000; for seven plants to supply all of Ford's requirements, start-up costs are estimated at $2 million. There would be additional start-up costs for a Motorcraft battery operation. The magnitude of these costs would depend on the other products included in Motorcraft, the distribution system followed and the period of time involved.

Conclusions and Recommendations

On the basis of the studies made to date, we conclude the following:

(1) A spark plug operation should be profitable and the investment justified if only present requirements are produced. Its profitability would be greatly enhanced, however, if the Company participated in the replacement market other than P & A.

(2) A battery operation would be very marginal. From a financial standpoint, the expected return on an operation supplying a portion or all of present requirements does not appear adequate to justify the investment involved. Our investigation of competitive companies reveals a number of factors that indicate it would be difficult for Ford to compete effectively in this business. These factors include wage rates substantially lower than Ford's, incentive pay plans, lower overhead rates and facilities that are substandard. In addition to the advantageous

Exhibit G-3

cost position, most outside companies merchandise their own brands in the replacement market and thereby obtain a substantially higher price for a major portion of their production.

We recommend that:

(1) Ford establish a spark plug manufacturing operation with capacity to produce 52 million plugs annually on a two-shift basis.

(2) Qualified personnel be recruited to staff the key positions in product engineering, manufacturing, engineering and production.

(3) Detailed studies be made covering the location of the operations in the Sandusky and Mt. Clemens Plants or other suitable Company facilities.

(4) Ford not establish a battery operation until such time as replacement sales (other than P & A) and the improved profits therefrom warrant such action.

Exhibit G-3

EXHIBIT I

FORD MOTOR COMPANY

SPARK PLUG OPERATIONS
PROJECTED SALES, PROFITS AND RETURNS

	Present Requirements		Present Requirements and Motorcraft (5% Penetration) (a)		Present Requirements and Motorcraft (10% Penetration) (a)	
	Amount	Per Unit	Amount	Per Unit	Amount	Per Unit
	(000)		(000)		(000)	
Unit Sales:						
OEM	15,000	$ 0.060	15,000	$ 0.060	15,000	$ 0.060
P & A	20,500	.355	20,500	.355	20,500	.355
Motorcraft—						
Wholesalers & Jobbers			8,000	.355	16,000	.355
Others (b)			8,000	.300	16,000	.300
Total	35,500	$ 0.231	51,500	$ 0.261	67,500	$ 0.276
	(000)		(000)		(000)	
Sales	$ 8,183	$ 0.231	$13,442	$ 0.261	$18,658	$ 0.276
Manufacturing Costs (c)	6,216	.175	8,189	.159	10,732	.159
Gross Profit	$ 1,967	$ 0.056	$ 5,253	$ 0.102	$ 7,926	$ 0.127
Expenses:						
Engineering	300	.009	300	.006	300	.004
A & C	300	.014	450	.009	500	.007
Selling & Advertising (d)			760	.015	1,525	.022
Total Expense	$ 600	$ 0.023	$ 1,510	$ 0.030	$ 2,325	$ 0.033
at Profit	$ 1,367	$ 0.033	$ 3,743	$ 0.072	$ 5,601	$ 0.084
Return A/T	13.9%		24.3%		26.7%	
Investment:						
Fixed Assets—						
Gross	$ 4,500	$ 0.127	$ 6,000	$ 0.116	$ 7,500	$ 0.111
Net (50%)	2,250	.063	3,000	.058	3,750	.056
Inventories (e)	1,310	.037	1,900	.037	2,495	.037
Cash (f)	490	.014	805	.016	1,120	.017
Receivables (g)	680	.019	1,690	.033	2,700	.040
Total	$ 4,730	$ 0.133	$ 7,395	$ 0.144	$10,065	$ 0.150

(a) Penetration of industry not including sales by automotive P & A operations.
(b) Private brand and sales to oil and tire and rubber companies.
(c) Assumes that Ford's unit costs would be 10% higher than Mars' for present requirements and the same as Mars' for higher volumes.
(d) At Mars rate of 4.71¢ per unit on Motorcraft sales.
(e) Mars' experience.
(f) 6% of sales.
(g) One month's sales on intra-company sales; Mars' experience on Motorcraft-type sales.

Exhibit G-8

EXHIBIT II

FORD MOTOR COMPANY
BATTERY OPERATIONS
PROJECTED SALES, PROFITS AND RETURNS

	Present Requirements		Present Requirements Detroit Area Only (a)		Present Requirements and Expansion (10% Penetration) (b)		Present Requirements and Expansion (10% Penetration) (b)	
	Amount	Per Unit	Amount	Per Unit	Amount	Per Unit	Amount	Per Unit
	(000)		(000)		(000)		(000)	
Unit Sales:								
OEM	1,972	$7.88	685	$7.78	1,972	$7.88	1,972	$7.88
P & A	430	7.96	110	7.96	430	7.96	430	7.96
Motorcraft:								
Wholesalers and Jobbers	—	—	—	—	830	9.50	1,700	9.50
Other(c)	—	—	—	—	830	8.00	1,700	8.00
Total	2,402	$7.90	795	$7.81	4,102	$8.25	5,802	$8.40
Sales	$18,975	$7.90	$6,205	$7.81	$33,835	$8.25	$48,715	$8.40
Manufacturing Cost(d)	17,342	7.22	5,700	7.17	30,490	7.42	43,050	7.42
Gross Profit	$ 1,633	$ .68	$ 505	$ .64	$ 3,405	$ .83	$ 5,665	$ .98
Freight Penalty(e)	120	.05	0	0	130	.03	120	.02
Adjusted Gross Profit	$ 1,513	$ .63	$ 505	$ .64	$ 3,275	$ .80	$ 5,545	$ .96
Expenses:								
Engineering	$ 400	$ .17	$ 150	$ .19	$ 410	$ .10	$ 400	$ .08
A & C	300	.20	160	.20	410	.12	500	.09
Selling and Advertising(f)	—	—	—	—	830	.21	1,700	.29
Total Expenses	$ 700	$ .37	$ 310	$ .39	$ 1,650	$ .43	$ 2,600	$ .46
Net Profit	$ 813	$ .26	$ 195	$ .25	$ 1,630	$ .37	$ 2,945	$ .50
Return: A/T	4.2%		3.1%		4.5%		5.5%	
Investment								
Fixed Assets—Gross	$ 8,285	$3.45	$2,750	$3.45	$14,150	$3.45	$20,000	$3.45
—Net (50%)	4,143	1.73	1,375	1.73	7,075	1.73	10,000	1.73
Inventories(g)	2,175	.91	725	.91	3,730	.91	5,280	.91
Cash(h)	1,140	.47	370	.47	2,030	.49	2,925	.50
Receivables(i)	1,580	.66	515	.66	4,450	1.08	7,330	1.26
Total	$ 9,038	$3.77	$2,985	$3.77	$17,305	$4.21	$25,535	$4.40

(a) Dearborn, Wixom, Wayne, Highland Park and Lorain assembly plants.
(b) Penetration of industry not including sales by automotive P & A operations.
(c) Private brand and sales to oil and tire and rubber companies.
(d) Based on Mars experience adjusted for percentage of dry charge batteries; for Detroit area plant, cost assumed to be 5¢ per unit below U.S. average, one-half of the difference in vendor selling prices.
(e) Difference in freight cost from seven proposed locations, (Detroit, New York, St. Louis, Chicago, Atlanta, Dallas and Oakland) and present vendor plants.
(f) At Mars' rate of 50¢ per unit on Motorcraft sales.
(g) Mars' experience.
(h) 6% of sales.
(i) One month's sales on intra-company volume; Mars' experience on Motorcraft sales.

EXHIBIT G-5

PRESENTATION

ASSOCIATED PRODUCTS MARKETING PROGRAM

AUGUST 21, 1959

(Revised)

FORD DIVISION OF FORD MOTOR COMPANY

ASSOCIATED PRODUCTS MARKETING PROGRAM

1. Background
2. Products
3. Channels of Distribution
4. Marketing Policies
5. Program Timing

On April 16, 1959, the Executive Committee approved the development of a private brand merchandising program for expanding the Company's participation in the parts market. Responsibility for launching this program was assigned to the Ford Division and it in turn, to Associated Products Marketing.

The function of Associated Products Marketing is to increase the Company's profits through increased penetration of the total competitive service parts market, and to do this with minimum unfavorable impact on Company or dealer profits derived from the sales of service parts.

In preparing to perform this function, it has been necessary to:

- Determine, by manufacturing location what competitive service parts are currently being manufactured and what parts can be manufactured with supportable new facilities and tooling investments.

Exhibit G-5

- Investigate all existing channels of distribution for automotive service parts; determine the most logical level at which to enter the market, and select the system which can give us the greatest coverage at economical costs.

- Establish marketing policies compatible with the distribution system selected, but not in conflict with the marketing policies of the vehicle divisions. These policies include product identification, prices and terms of sale, and programs designed to provide adequate working relationships between manufacturing sources and distributors.

The purpose of this presentation is to acquaint you with the status of each of these elements in our marketing plan and to request your comments or concurrence, as appropriate.

2. Products

Exhibit I shows the major service parts product lines (1) currently being manufactured by the Company's manufacturing divisions, (2) the Ford Division 1958 sales of each line and (3) the relative importance of each line to Ford Division's total service parts volume. (Although M-E-L Division volume is excluded, the relative importance to the Company of each line is fairly represented by the Ford Division data shown.)

The product lines presently being manufactured by the Company represent 25% of the Company's total parts sales and 40% of the Company's competitive parts sales. In some cases, the complete product lines are not presently being manufactured by the Company, and most product lines are generally applicable only to Ford.

Major Service Parts Product Lines

	Annual Sales Volume (Millions)	% of Total Competitive Lines	% of All Lines
Competitive Lines Manufactured Wholly or Partially By			
Hardware and Accessories Division			
Ignition System Components	$ 10.1	5.3%	3.4%
Carburetors and Components	4.8	2.5	1.6
Shock Absorber Kits and Other	3.5	1.8	1.1
Total Hardware and Accessories Division	18.4	9.6%	6.1%
Transmission and Chassis Division			
Standard Transmission Components	$ 10.7	5.6%	3.6%
Automatic Transmission Components	3.4	1.8	1.1
Steering Mechanism Components	8.1	4.2	2.7
Axel and Driveshaft Components and Other	12.0	6.2	4.0
Total Transmission and Chassis Division	$ 34.2	17.8%	11.4%
Engine and Foundry Division			
Radiators	$ 3.9	2.0%	1.3%
Spring Assys. and Components	3.2	1.7	1.1
Oil and Water Pumps	2.4	1.3	0.8
Gears and Other Engine Components	7.3	3.8	2.4
Total Engine and Foundry Division	$ 16.8	8.8%	5.6%
Glass Division—Glass	6.5	3.4%	2.2%
Metal Stamping Division			
Hub Caps and Headlamp Assemblies	$ 0.8	0.4%	0.3%
Total Competitive Lines Manufactured	$ 76.7	40.0%	25.6%
Competitive Lines Not Manufactured By Company	115.0	60.0%	38.3%
Total Competitive Lines	191.7	100.0%	63.9%
Captive Lines Manufactured By Company	$ 83.5		27.8%
Captive Lines Not Manufactured By Company	24.9		8.3
Total Captive Lines	$108.4		36.1%
Total Service Lines	$300.1		100.0%

Exhibit G-5

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Exhibit G-5

The four major channels of distribution for service parts are outlined on Exhibit II. Of these four channels, sales to their franchised dealers are the most important, accounting for approximately half of all parts sales, and for more than half of the manufacturers profit from parts sales.

Of the three other channels of distribution, only the retail chain outlets such as Sears Roebuck and Montgomery-Ward reach the consumer direct without any intermediate level of distribution other than the retail chain itself. Sales through these retail chain outlets have been somewhat limited in the past by the relative inability of such outlets to provide the immediate availability generally required by retailers and vehicle owners. However, these organizations are overcoming this problem through the development of service centers, and are growing in importance as a result.

An increasing share of the fast growing filling station market is being handled through the so-called TBA (tires, batteries, accessories) program of major oil companies. While some of these programs involve direct sales of service parts to oil companies, most oil companies do not themselves purchase and distribute parts but instead encourage their filling stations to purchase their parts requirements from companies such as Firestone, Goodrich and U. S. Rubber, who act as distributors to filling stations. In return for their sales solicitation efforts, the oil companies are paid commissions ranging from 5% to 10% by the supplying manufacturers. The remaining channel of distribution—through warehouse distributors—jobbers—is second only to franchised vehicle dealers in terms of sales volume of service parts. Unlike either the retail chains or retail companies, this channel—

- Reaches all types of consumers and retailers
- Handles all types of parts

Exhibit G-5

We have discussed sales possibilities with both major oil companies and the major retail chains, and are working on programs designed to secure maximum sales through these channels. At this time, however, it appears that the greatest opportunity for immediate sales volume open for Associated Products Marketing lies in the warehouse distributor—jobber channel of distribution.

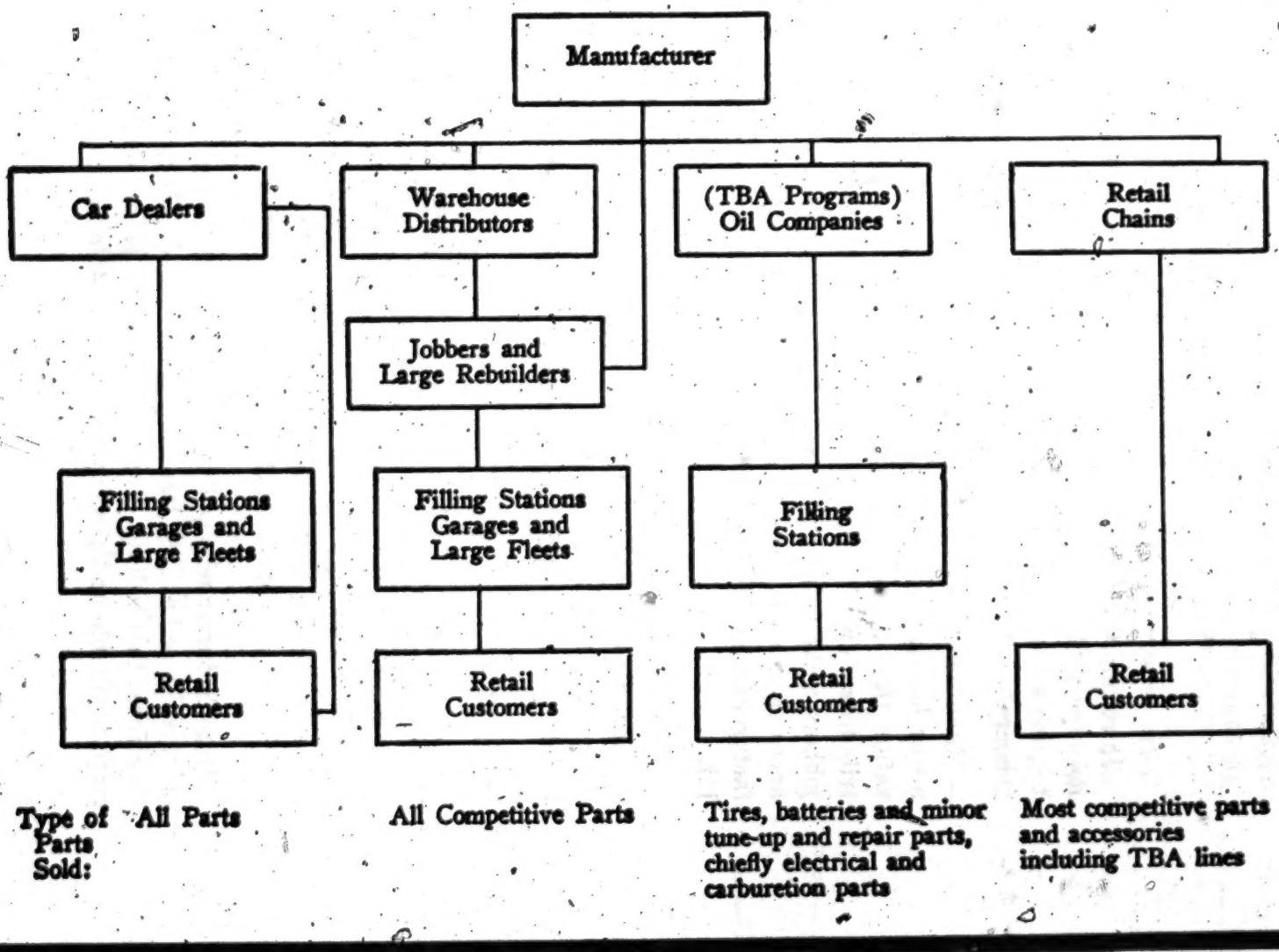

Manufacturer
Car Dealers
Warehouse Distributors
(TBA Programs) Oil Companies
Retail Chains
Jobbers and Large Rebuilders
Filling Stations Garages and Large Fleets
Filling Stations Garages and Large Fleets
Filling Stations
Retail Customers
Retail Customers
Retail Customers
Retail Customers
Type of Parts Sold:
All Parts
All Competitive Parts
Tires, batteries and minor tune-up and repair parts, chiefly electrical and carburetion parts
Most competitive parts and accessories including TBA lines

Exhibit G-5

Exhibit G-5

3. Channels of Distribution

Warehouse Distributors vs. Jobbers as Primary Distribution Channels

In selling through the warehouse distributor-jobber channel of distribution, manufacturers may sell either directly to jobbers or to warehouse distributors who in turn sell to jobbers.

Manufacturers who sell directly to jobbers must maintain a warehousing system and have a much larger sales organization than do manufacturers who sell to warehouse distributors. In addition, manufacturers selling directly to jobbers make volume rebates and pay redistribution allowances on sales to other jobbers. Three examples of manufacturers who sell directly to jobbers are shown on Exhibit III.

Although precise data on cost differences between these two distribution systems are not available, discussions with key personnel of manufacturers who sell directly to jobbers indicate that the major added cost of these manufacturers are:

	Percent of Sales At Jobber Prices
Volume rebates on purchases	4%- 8%
Redistribution allowances	2%- 8%
Warehousing costs	7%-10%
Additional sales organization	3%-10%
Total	16%-36%

Manufacturers who sell to warehouse distributors almost universally sell at 20% less than jobber prices. It appears, therefore, that selling directly to jobbers is probably no more profitable and possiby much less profitable than sell-

ing to warehouse distributors. This would be particularly true in the case of a manufacturer who had a relatively limited line of products to sell.

Since we presently have a relatively limited line of products and since direct sales to jobbers would require the immediate activation of an organization sizable enough to deal with several thousand relatively small accounts, it appears that at this time we should sell through established warehouse distributors rather than directly to jobbers.

Exhibit III

Comparison of Service Parts Marketing Operations of Three Manufacturers Selling Directly to Jobbers

	Thompson Products	McQuay-Norris	Perfect Circle
Products	Engine, chassis and automatic transmission parts	Engine and chassis parts	Piston rings
Number of personnel in field organization	83	68	68
Number of direct accounts	3,000	2,200	100
Number of indirect accounts	NA	1,560	1,450
Number of warehouses	39	20	1
Volume rebate	Variable up to 10% on purchases over $60,000 annually, non-retroactively	Variable up to 10% on purchases over $60,000 annually, non-retroactively	10% on purchases in excess of $3,000 annually
Redistribution allowances:			
Rate	10%	10%	10%
Percent of total volume on which redistribution allowances are paid	35%	20%	95%

Exhibit G-6

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Exhibit G-5

Opportunities for Sales Through Warehouse Distributors

At the present time there are only two major warehouse distributor organizations with national coverage:

1. The National Automotive Parts Association (NAPA).
2. The Automotive Electric Association (AEA).

Both associations include manufacturers, warehouse distributors and jobbers as members. In practically all other respects, however, these two organizations differ in their policies and methods of operation as shown on Exhibit IV.

Exhibit IV

Comparison of NAPA and AEA Systems of Parts Distribution

	NAPA System	AEA System
Number of warehouses	45, principally in 3 chains	107 individually owned
Number of jobbers accounts	2,400	4,000/6,000
Produce lines presently handled	All competitive parts	Specialize in ignition and carburetion assemblies and components. Do extensive rebuilding
Estimated annual sales volume (at jobber cost)	$200 million	$250 million
Policy regarding manufacturing sources	Manufacturers producing lines for all vehicle makes and with quality levels equal or superior to original vehicle manufacturers	Original vehicle manufacturer or vehicle manufacturer's sources
Brands handled by individual warehouse distributors and jobbers	National brands generally sold exclusively through NAPA	Subject to negotiation between individual manufacturers, warehouse distributors and jobbers
Public identfication of jobbers with system	Yes	No

Exhibit G-6

From discussions with top executives of these two major organizations it appears that the possibilities for selling service parts to their respective warehouse distributors are as follows:

NAPA

Since NAPA warehouses prefer to purchase from manufacturers who produce lines which cover all vehicle makes and since we are not presently manufacturing such lines, opportunities for major sales to NAPA appear to be poor. Sales to NAPA warehouses would be limited, at least for the immediate future, to lines which are not available for all vehicle makes from a single parts manufacturer, e.g. automatic transmission parts. (We have delivered an initial order of bulk parts to Balkamp, Inc., a subsidiary of NAPA, who will package them under their Microtest brand and ship for their account to NAPA warehouses nationally.)

AEA

Since AEA warehouse distributors, unlike NAPA, are organized to distribute original vehicle manufactured parts, opportunities for sales to them are excellent. Although they are currently specializing in electrical and carburetion parts, many AEA warehouse distributors are interested in handling all lines of parts manufactured by Ford for Ford vehicles, including lines which they are not currently handling.

Exhibit G-5

SUMMARY

In summary, it appears that:

1) Sales through warehouse distributors offer the greatest immediate profit opportunity for increasing the Company's present profits from sales of service parts to dealers.

2) Sales through warehouse distributors require a minimum field sales force and warehousing activity, thus giving us quick, broad coverage of jobbing outlets.

3) There are currently limited opportunities for sales to the NAPA warehouse system.

4) Sales to the warehouse distributor members of the AEA would give us immediate access to between 4,000 and 6,000 jobbers or approximately 50% of the jobbing industry, not associated with the NAPA system.

5) All lines of competitive parts can ultimately be sold through the AEA warehouse distributors.

For these reasons, it is proposed to begin immediately to promote sales of our products through the AEA Warehouse Distributors and their jobber outlets.

Exhibit V shows the product lines which would be offered initially and the sales volume anticipated on each line during the first year. On the total sales volume of $5.7 million, it is estimated that the Company's profits would be increased by $1.6 million during 1960.

Exhibit G-5

EXHIBIT V

ANTICIPATED ANNUAL VOLUME FOR PRODUCT LINES TO BE OFFERED INITIALLY

Product Lines	Anticipated 1960 Sales Volume (000)
Currently Being Sold to Holley Carburetor	
Voltage Regulators	$ 807
Generator Bearings	133
Starter and Generator Brushes	108
Stoplight Switches	61
Carburetor Repair Kits	29
Carburetor Gasket Kits	24
Carburetor Needle and Seat Assemblies	14
Carburetor Diaphragms	14
Total	$1,190
Not Currently Being Sold to Holley Carburetor	
Distributor Point Assemblies	$1,481
Condensers	646
Ignition Coil Assemblies	524
Armatures	426
Generators	275
Distributor Vacuum Controls	233
Distributor Housings	206
Distributor Assemblies	156
Starter Drives	150
Starters	150
Starter Switches	107
Rotors	85
Carburetors	81
Total	$4,520
TOTAL ALL LINES	$5,710

Exhibit G-5

4. Marketing Policies
Pricing
Brand Names

Prices of service parts sold to AEA Warehouse Distributors would be based on FoMoCo prices with consideration given to the warehousing and sales functions performed by the warehouse distributors.

The price structures for a typical part sold under the FoMoCo brand to a Ford dealer and for the corresponding part sold to an AEA Warehouse Distributor are compared on Exhibit VI.

In the event that the application of appropriate functional discounts to FoMoCo prices results in either excessively high or significantly low profit margins to manufacturing divisions on a given product line or component, each case will be submitted to the appropriate pricing board for investigation and indicated action.

Exhibit VI

Comparison of Price Structure for a Voltage Regulator Sold to Ford Dealers and to AEA Warehouse Distributors

Sales to Ford Dealers	
Terminology	**Price**
Suggested list price	$8.65
Suggested wholesale prices ..	5.80
	5.62
Dealer net price	5.19
Jobber net:	
Before cash discount	3.89
After cash discount	3.79

Sales to Warehouse Distributors	
Terminology	**Price**
Suggested list price	$8.65
Suggested wholesale prices ..	6.06
	5.62
	5.19
Suggested jobber net:	
Before cash discount	3.89
After cash discount	3.81
Warehouse distributor net ...	3.02
Before cash discount	3.02
After cash discount	2.96

Exhibit G-5

In approving the private brand merchandising program on April 16, 1959 the Executive Committee specified that FoMoCo brand parts should only be sold through Ford Motor Company vehicle dealers. Accordingly, it is necessary to select a different brand name which will neither be confused with the name FoMoCo nor connote FoMoCo parts being sold under a different brand name.

The brand name for parts to be sold to the AEA Warehouse Distributors should, we believe, have the following characteristics:

1. Suggest automotive products.
2. Suggest a high level of quality and dependability.
3. Be applicable to all types of parts for all make vehicles.
4. Be as distinctive as possible.
5. Be easy to pronounce and remember.
6. Lend itself to effective use in advertising, packaging and displays.

In arriving at our recommendation, consideration has been given to almost 100 suggestions submitted by personnel of the Ford Division, the various manufacturing divisions, staff offices and advertising agencies. (See appendix)

Of the names suggested, the ones which meet these conditions are:

Mobile Master

Motoramic

Motorcraft

Although each of these names suggests high quality automotive products, is applicable to all types of parts, is reasonably distinctive from other automotive part names, is easily pronounced and remembered, and lends itself to effective use in advertising, packaging and displays, we recommend adoption of the name "Motorcraft" which we believe best meets all of these conditions. This name is being reviewed by the Office of General Counsel and if satisfactory to the Ford Division, will be submitted for final approval by the Marketing Committee in accordance with established procedures for major name selections.

Parts Identification

Parts sold to AEA Warehouse Distributors would be sold and catalogued under Ford Motor Company part numbers but would not be otherwise identifiable as "FoMoCo", "M-E-L" or tractor parts. When using the part number on containers or in catalogues, the words "Replacement for" or "replace" will precede the part number.

No parts carrying the vehicle name as part of its basic design, such as hub caps, will be offered to independent outlets.

5. Program Timing

In anticipation of the proposed program for selling "Motorcraft" parts to AEA Warehouse Distributors, the Hardware and Accessories Division notified Holley Carburetor Company on August 4, 1959 of the Company's intent to cancel on November 4, 1959, their contract for the purchase of certain Ford manufactured ignition and carburetion parts.

We have started to develop the necessary organization and programs required to begin sales to warehouse distributors by approximately January 1, 1960. The timing of required actions associated with this program is shown on Exhibit VII.

Exhibit G-5

PROGRAM TIMING FOR SALES TO A.E.A. CENTRAL DISTRIBUTORS
EXHIBIT VII

		Date
1.	Meeting with selected distributors	August 25
2.	Finalize statement of sales policy	"
3.	Finalize statement of pricing policy	"
4.	Select brand name	"
5.	Determine parts numbering system to be used	"
6.	Determine lines to be offered initially	"
7.	Apply for AEA Membership	September 1
8.	Establish catalog requirements	"
9.	Establish stock order pad requirements	"
10.	Establish sales agreement form	"
11.	Determine specific parts to be offered initially	"
12.	Select advertising agency	"
13.	Finalize packaging design	September 15
14.	Register trademark	October 1
15.	Establish specific prices	"
16.	Determine warehouse distributor accounts to be solicited initially	"
17.	Begin solicitation of warehouse distributors	"
18.	Determine initial advertising program	"
19.	Forecast January requirements	"
20.	Submit plans and budget for sales representatives	"
21.	Start interviewing sales representatives	November 1
22.	Establish technical service publication requirements	"

Exhibit G-5

		Date
23.	Establish technical service training requirements	"
24.	Publish catalogs	"
25.	Establish order handling procedures	"
26.	Establish packaging arrangements	"
27.	Establish warehousing arrangements	"
28.	Make initial distribution of order pads	"
29.	Receive initial orders	December 1-15
30.	Annual meeting of AEA distributors	" 4-11
31.	Submit initial orders to H & A Division	" 20
32.	Establish credit limits	January 1
33.	Establish accounting procedures	"
34.	Start deliveries	"

Brand Names

AllCar Products
Am-Ro-Co
American Road Products
AmerRoad Quality Products
Amro-Par (American Road Parts)
Amro Products
Auto-Par Parts & Accessories
Built-More
Carcraft
Carite
Centaur Products
Century Nineteen Products
Century Products
Classic
Criterion
Dearborn Line
Dearborn Products
Essential Products
Ex-Per-To
FMC Parts
F-M-C Products
FoFmly Products
FoPar
Ford Built Parts & Accessories
Fordco Products
Ford Crest Products
Ford Family Products
Ford Jobber Products
Fordex
Fordite
Fordline Products
Fordrite
Ford-Way
Ford-X
Formade
Formatic
Formco
Formo
For-Par Products
For-Star
Fortex
Genuine Ford Motor Co. Prod.
Genuine Ford Motor Parts
Headliner
Made-Rite
Master Made Products
Master Mechanic
Melford
Mileage Products
Mobile Master
Mo-Tek
Mo-To-Par
Motoramic
Motorcraft
Motor Pak Products
Par-Tek
Par-X
Parts by FoMoCo
Parts by For-Mel-Co
Phoenix Products
Pioneer
Precision-Craft
Qualiford
Quality-Controlled
Quality-Crafted
Replacement Products
River Rouge Products
Rotunda Parts
Rotunda Products
Rougecraft Parts
Rouge Products
Rouge Universal
Sentry Products
Tek Cel
Tekskil
Time-Tested
Transparts
Unicar
Unitek
Universal Products
UniLine
Vanguard
X-Cel
X-Cel-Par

Exhibit G-5

EXHIBIT G-6

October 1, 1959

FORD MOTOR COMPANY
Executive Communication
Mr. R. S. McNamara

Subject: Status of the Private Brands Parts Marketing Program

The purpose of this memorandum is to summarize the status of the private brand service parts marketing program and to request your comments on our plans for the immediate future of this program as it applies to ignition and fuel system parts.

The Associated Products Marketing Office has explored the various channels for distribution of competitive service parts and has concluded that:

- Although sales to dealers is recognized as the most profitable level at which to enter the market, we are not prepared to undertake the facilities, inventory investments and organizational costs necessary to support a direct to dealer program with a limited line of products.

- Major oil companies are undecided as to the best method for sourcing their dealers' requirements of the "tune-up" parts we are preparing to offer initially. Frequent discussions with marketing executives of Texaco, Inc., whose practices are followed closely by sixteen other major oil companies, indicates that they are not interested in direct purchase contracts at this time, but prefer to deal with major tire companies for the automotive parts requirements of their service station dealers. These discussions are being continued at regular intervals. A meeting with the Executive Mar-

keting Committee of Texaco, Inc., has been tentatively scheduled for November. Top management at Texaco leans toward tune-up parts and training programs sponsored directly or indirectly by vehicle manufacturers, coupled with wide brand acceptance; e.g. Delco. Sales to major oil companies, directly or indirectly, would probably be limited to fast moving, high volume parts and would not provide full line representation in the market.

- Sales to major tire manufacturers, Firestone, B. F. Goodrich and U. S. Rubber Company offer possibilities for profitable sales on the limited number of tune-up parts which they would sell to major oil company outlets under contract. Follow-up calls on Firestone and Goodrich are scheduled for Monday, October 5, to learn the significance of the recently announced B. F. Goodrich-United Motors service agreement and to coordinate the position of Texaco, Inc. and other oil companies with the current thinking of the tire companies. It is doubtful if any volume sales can be negotiated at this time and it may be six to twelve months before the coordinated program will crystallize. Consideration must also be given to the possible effect that direct sales to oil companies or tire companies would have on relationships with warehouse distributors handling our complete ignition and fuel system lines.
- Volume sales to chain stores, such as Sears Roebuck and Montgomery-Ward are possible, but at prices generally 35% less than our prices to dealers. They are retailers in competition with our dealers. It is questionable whether we can make justifiable cost savings which would enable us to meet their cost requirements.

Exhibit G-6

We will continue our negotiations with oil companies, tire companies, and chain outlets until the extent to which we can and should deal with them on a direct basis has been determined.

- Because we have immediately available for sale a relatively limited line of products and because direct sales to jobbers would require the activation of a sizeable field organization to deal with several thousand relatively small accounts, it appears that it would be substantially more profitable to enter the market initially through warehouse distributors.
- Sales to the warehouse distributor members of the Automotive Electric Association (AEA) would provide immediate access to approximately half of the jobbing industry. The warehouse distributor members of the AEA are organized to distribute parts for single vehicle lines, such as Ford, while the National Automotive Parts Association (NAPA), the only other sizeable warehouse distributor group, distributes parts produced by manufacturers each of whom manufactures parts for all makes of vehicles. AEA has a well developed program for reaching the gasoline service station market under test in several major markets.

For these reasons, we are proposing to sell ignition and fuel system parts through the AEA warehouse distributors and their jobber outlets, beginning approximately January 1, 1960. The attached Exhibit I shows the product lines which would be offered initially and the sales volume anticipated on each of these lines during the first year. Subsequently, we plan to develop programs for other competitive

lines and to offer such programs to the AEA warehouse distributors.

Membership in the AEA, in our opinion, will be quite helpful in securing maximum market penetration. We have applied for and been accepted as a member of the Manufacturers Division of the Association.

The status of the major policy issues and the actions required to implement the proposed program may be summarized as follows:

Pricing Policy:

Prices of service parts sold to AEA warehouse distributors would be based on FoMoCo jobber net prices for corresponding parts with consideration for the warehousing and sales functions performed by the warehouse distributors. The price structures for a typical part sold under the FoMoCo brand to a Ford dealer and for the corresponding parts sold to an AEA warehouse distributor are shown on Exhibit II.

Brand Name:

In a separate letter we are requesting the Marketing Committee to approve the brand name "Motorcraft" for parts to be sold to the warehouse distributors.

Parts Identification:

Parts sold to AEA warehouse distributors would be sold and catalogued under the same Ford Motor Company part numbers as are the corresponding "FoMoCo" brand parts, but would not be otherwise identifiable as "FoMoCo" parts. When using a part number on containers or in catalogues,

the word "replacement for" or "replaces" would precede the part number. Packages, literature, advertising copy and other printed matter will associate "Motorcraft" with the supplying manufacturing division, e.g. Hardware and Accessories Division, Ford Motor Company.

Cancellation of Holley Contract:

The contract between Holley Carburetor Company and the Hardware and Accessories Division, for sales to Holley of parts lines which we plan to sell under our proposed program, has been cancelled and replaced by a month-to-month contract. This month-to-month contract will be cancelled before deliveries to AEA warehouse distributors are started.

Selection of an Advertising Agency:

In a separate letter we are requesting Marketing Committee approval to appoint the Griswold-Eshleman Company to act as the advertising agency for the private brands marketing program.

Sales Agreement:

The Office of General Counsel is drafting a sales agreement between AEA warehouse distributors and Ford Motor Company and a standard sales agreement between warehouse distributors and their jobber customers. Under provisions of this agreement, AEA outlets may not advertise "Motorcraft" products as "Genuine Ford Parts". Since the whole concept of AEA marketing has been built around

Exhibit G-6

"Original Equipment Parts", as outlined in the attached pamphlet, we will make it clear that "Motorcraft" must not be directly associated with this slogan or nomenclature. It may be impossible to avoid indirect association in this area. We plan to submit both of these agreements to the Executive Committee for approval on October 21.

The attached presentation covers in more detail a number of the points summarized above. We would appreciate any comment you may want to make regarding our proposed plans.

J. O. Wright

Exhibit G-6

Exhibit I

Anticipated Annual Volume for Product Lines to be Offered Initially

Product Lines	Anticipated 1960 Sales Volume (000)
Currently Being Sold to Holley Carburetor	
Voltage Regulators	$ 807
Generator Bearings	133
Starter and Generator Brushes	108
Stoplight Switches	61
Carburetor Repair Kits	29
Carburetor Gasket Kits	24
Carburetor Needle and Seat Assemblies	14
Carburetor Diaphragms	14
Total	$1,190
Not Currently Being Sold to Holley Carburetor	
Distributor Point Assemblies	$1,481
Condensers	646
Ignition Coil Assemblies	524
Armatures	426(a)
Generators	275(a)
Distributor Vacuum Controls	233
Distributor Housings	206
Distributor Assemblies	156
Starter Drives	150
Starters	150(a)
Starter Switches	107
Rotors	85
Curburetors	81
Total	$4,520
Total All Lines	$5,710

(a) Tentative pending determination of whether or not generators, starters and armatures are competitive or captive items.

Exhibit G-6

EXHIBIT II

COMPARISON OF PRICE STRUCTURE FOR A VOLTAGES REGULATOR SOLD TO FORD DEALERS AND TO AEA WAREHOUSE DISTRIBUTORS

Sales to Ford Dealers		Sales to Warehouse Distributors	
Terminology	**Price**	**Terminology**	**Pric**
Suggested list price	$8.65	Suggested list price	$8.6
Suggested wholesale price	(a)	Suggested wholesale price	(b
Dealer net price	5.19	Dealer net price	(b
Jobber net:		Suggested jobber net:	
Before cash discount	3.89	Before cash discount	3.8
After cash discount	3.79	After cash discount	3.8
		Warehouse distributor net:	
		Before cash discount	3.0
		After cash discount	2.9

(a) Variety of prices published in "Price and Discount Table."
(b) No proposal pending further discussions with AEA Warehouse Distributors. In any event, no suggested jobber resale prices below Ford dealer net prices would be published.

EXHIBIT G-7

PRESENTATION TO MARKETING COMM.

January 15, 1960

FORD DIVISION OF FORD MOTOR COMPANY

Presented to
McNamara January 15, 1960

IV. ASSOCIATED PRODUCTS MARKETING

A. INTRODUCTION

The April 16, 1959 report of the Parts and Service Study Group to the Executive Committee stated in part:

"It appears evident that the Company should also seek out opportunities for selling parts through alternative channels of distribution in a manner that would not jeopardize profits currently earned from sales of parts to dealers."

• • • • •

"Sales through other channels should be designed to develop consumer acceptance of alternative Ford Motor Company brands in the same manner that GM has successfully prompted AC and Delco. Such programs could set the stage for eventual sales and distribution of parts that can be used on other than Ford Motor Company vehicles. Sales of automotive parts under non-FoMoCo brands would also include:

- Competitive parts sold by major oil companies, mail order houses, and automotive distributors who either manufacture or purchase, package and distribute parts under their own brand names. Such parts might in-

clude, for example, voltage regulators, generator armatures, glass, shock absorbers, etc."

The Study Group recommended, and the Executive Committee approved, the Company's expanding its participation in these private brand markets within the framework of the following conditions:

"1. FoMoCo brand parts should continue to be sold only through Ford dealers.

2. The parts sold through outside channels should be limited to competitive items which are already available from other manufacturers or we have reason to believe will be made available.

3. Efforts should be made to establish new Ford Motor Company controlled brand names that could eventually be applied to parts that will fit other than Ford Motor Company vehicles.

4. In order to maximize Company profits, emphasis under this plan would, in most instances be given to end items that are or can be manufactured at a reasonable profit within Company facilities."

The responsibility for investigating potential market outlets for non-FoMoCo, brand parts and for negotiating sales agreements with appropriate outlets was subsequently assigned to the Associated Products Marketing office of the Ford Division.

B. Market Analysis

We have previously noted the continuing trend in which automotive service is shifting from dealers to other service outlets. Because this trend results in large part from the

greater convenience available to customers through these competitive outlets, as well as lower service prices in some instances, it seems clear that the trend will continue. It follows that if Ford is to achieve a satisfactory penetration of the service parts market, we must find ways of increasing our sales to those service outlets whose share of the market is increasing.

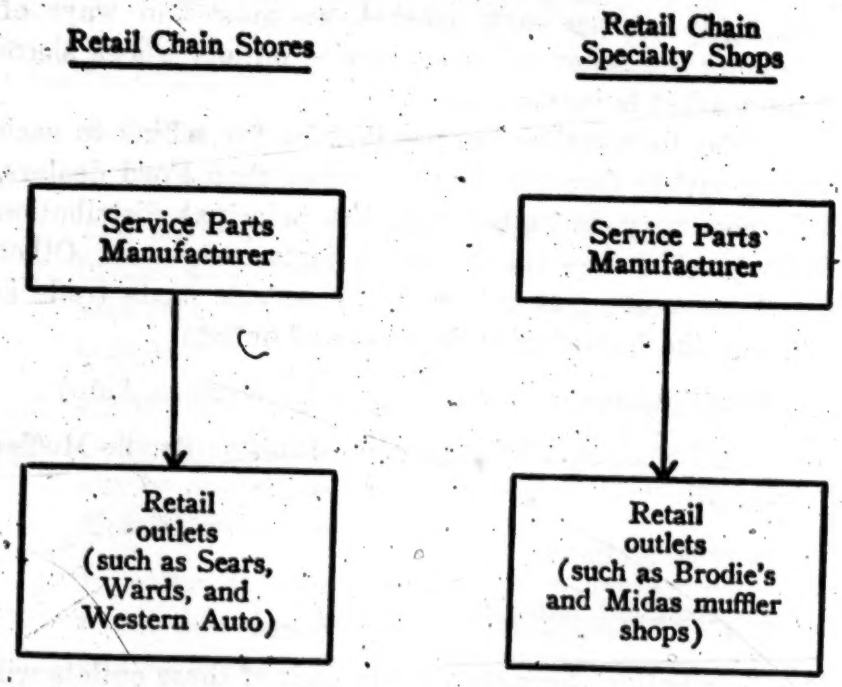
In order to visualize the possibilities for selling to such service outlets through channels other than Ford dealers, it is necessary to understand the principal distribution channels which now reach service parts customers. Other than automobile dealers, the retail service parts trade is based on the following major types of outlets:

- Retail chain stores (Sears, Wards, Western Auto)
- Retail chain specialty outlets (Midas or Brodie Muffler shops)
- Service stations
- Independent garages

The distribution channels serving each of these outlets will be described in the following analysis:

Exhibit G-7

CHANNELS FOR THE DISTRIBUTION OF SERVICE PARTS THROUGH TYPICAL RETAIL CHAIN STORES AND SPECIALTY SHOPS



A considerable increase in penetration of the parts market has been achieved by retail chain stores, such as Sears and Wards, and retail chain specialty shops. Parts sold through those channels are usually distributed directly from the manufacturer to the retail chain. The parts bear the trade names of the distributing chains, and are generally priced well below the standard name brands, including FoMoCo. These price differences are illustrated on the next chart.

Comparison of Ford and Sears Roebuck Prices for Selected Service Parts

Product Line	Example Ford Part No.	Ford List Price	Ford Dealer Net Price	Sears List Price	Sears List Price as a Per Cent Over (Under) Ford	
					List	Dlr. Net
Spark Plugs: Prem.	B7A 12405-B	$ .95	$ .54	$ .79	(17%)	45%
Std.				.53	(44%)	(2%)
Ignition Coils	B6A 12029-B	8.00	4.80	3.49	(56%)	(27%)
Batteries	B6A 10655-C	29.00	19.25	16.95	(42%)	(12%)
Exhaust Pipes	B4AA 5255-A	4.55	2.64	2.89	(37%)	9%
Mufflers (Alum.)	B9A 5230-F	14.20	8.24	8.45	(40%)	3%
Water Pumps	B6A 8501-B	12.95	7.51	7.89	(39%)	5%
Radiators	B9A 8005-F	64.75	38.85	48.49	(25%)	25%
Crankshaft Brg. Sets	Several	14.70	8.54	7.98	(46%)	(7%)
Intake Valve Sets	B4A 6507-AA	10.80	5.92	5.39	(48%)	(9%)
Exhaust Valve Sets	B6A 6505-A	13.20	7.20	5.89	(55%)	(17%)

In view of these price relationship there appear to be no possibilities for the sale of regular Ford service parts through this channel. Service parts could perhaps be designed and manufactured by Ford Motor Company specifically for the sale through Sears Roebuck and similar outlets under their brand names. This possibility is being studied.

Exhibit G-7

327a

Exhibit G-7

The remaining distribution channels, through which service parts reach independent outlets other than retail chains and specialty shops, are shown on the following diagram:

Exhibit G-7.

Sales of Service Parts to Service Stations Through Tire Companies:

(e.g., Texaco-Firestone plan)

Under this program, Firestone sells the following types of parts to about 17,000 Texaco dealers from approximately 700 supply warehouses and large tire jobbing stores:

Tires and tubes	Oil filter caps	Windshield wiper blades
Batteries	Fuses	Waxes and polishes
Spark plugs	Auto lamps	Car-care chemicals
Oil filter cartridges	Direction signal flashers	
Air cleaners	Gas and radiator caps	

Firestone carries all the inventory investment and accounts receivable, and pays Texaco a commission of from five to ten per cent (depending on the product) on all sales to Texaco dealers. Texaco supports Firestone's programs through their salaried field sales force of over 3,000 employees. Firestone purchases service parts and accessories from independent manufacturers at warehouse distributor prices. Firestone sells to approximately 50 per cent of all Texaco dealers under a formal arrangement, and reaches an additional 30 per cent through casual sales. The remaining 20 per cent of Texaco dealers are serviced by B. F. Goodrich and U. S. Rubber Company under an arrangement similar to that of Firestone. Firestone has parallel arrangements with sixteen other major oil companies, and Goodrich and U. S. Rubber also have additional oil company accounts.

Exhibit G-7

Sale of Service Parts to Service Stations Through Oil Company Programs:

(e.g., Standard Oil program)

Under this program, all merchandise is sold to the service stations by the various Standard Oil companies, generally either through their regular petroleum distributors, or through separate TBA (Tires, Batteries, and Accessories) warehouses operated by the oil companies.

Each Standard company purchases directly from manufacturers, at approximately warehouse distributor prices. The Atlas Supply Company performs certain research and quality control functions, and is reimbursed by the Standard Oil companies for these services and for the use of the Atlas brand name.

Both in the tire company and oil company programs, the service parts currently offered are items which do not require a high order of mechanical skill for proper installation. This limitation apparently reflects concern of the oil companies with the possibility of customer dissatisfaction with mechanical repairs because of parts failures or improper installation. Since few, if any, of the parts lines now being offered by the oil and tire companies are now manufactured by Ford, these programs do not at present offer a significant opportunity for profitably expanding our penetration of the aftermarket.

General Motors has recently offered a limited number of high volume ignition parts for most makes of vehicles (including Ford), for sale through the B. F. Goodrich Company, Richfield Oil Company, and Standard Oil of Ohio. Although detailed information on the results of these programs is not available, it is understood that they have not been particularly successful thus far.

Exhibit G-7

As yet, no single program for supplying complete lines of service parts has been adopted by any major oil or tire company.

Aside from the tire and oil company programs described above, which deal with the relatively few high-volume parts commonly stocked by filling stations, nearly all non-dealer service outlets obtain their parts from the 14,000 independent parts jobbers. As illustrated on the diagram, there are two major patterns followed by manufacturers in selling to jobbers:

- *Sales directly from manufacturers to jobbers or to redistributing jobbers.* Several major manufacturers, including the United Motors Service of General Motors, McQuay-Norris, Thompson Products, and Perfect Circle, sell direct to several thousand jobbers. Where one jobber re-sells parts to a smaller jobber, a "redistribution allowance" of eight to ten per cent is commonly allowed in the form of a rebate to the redistributing jobber. (General Motors provides the redistribution allowance only on batteries and spark plugs.) The major disadvantage to this plan for Ford Motor Company is that it would require the creation of a major selling organization through which to reach the thousands of jobber outlets. This would be both time-consuming and expensive.

- *Sales through warehouse distributors.* There are two major associations of "warehouse distributors" which serve as middlemen between manufacturers and jobbers: the National Automotive Parts Association (NAPA), and the Automotive Electric Association (AEA). The NAPA group represents major manufacturers who manufacture lines of parts applicable to all makes of vehicles. The AEA group, on the other hand, specializes in "original equipment," and is there-

fore keenly interested in selling Ford products. The advantages offered by such a distribution channel include the following:

- The AEA warehouse distributors and their jobbers are established specialists in ignition and carburetion parts, lines which we can most readily supply immediately.
- The AEA group specializes in "original equipment." Thus, through their jobbers, they are in a position to foster complete lines of "original equipment" parts. GM parts are already secured by AEA jobbers from AC and UMS; Chrysler ignition parts, from Electric Autolite; and Chrysler carburetion parts, from Zenith, Stromberg and Carter. Potentially such an original equipment grouping could be the most powerful product offering in the parts business.
- The AEA conducts excellent training programs for service station mechanics. Their training programs are already being used in many cases to meet the desire of the oil companies for adequate training of their service station mechanics.
- The AEA is interested in distributing lines of Motorcraft parts in addition to the ignition and carburetion lines.

C. Sales Programs

The Associated Products Marketing Office is initiating a major sales program in 1960, based on the sale of parts under the trade name "Motorcraft," through some 47 distributor members of the Automotive Electric Association. The relationship of this to existing programs is illustrated on the next chart.

Relationship of Motorcraft Program to Existing Service Parts Distribution Channels

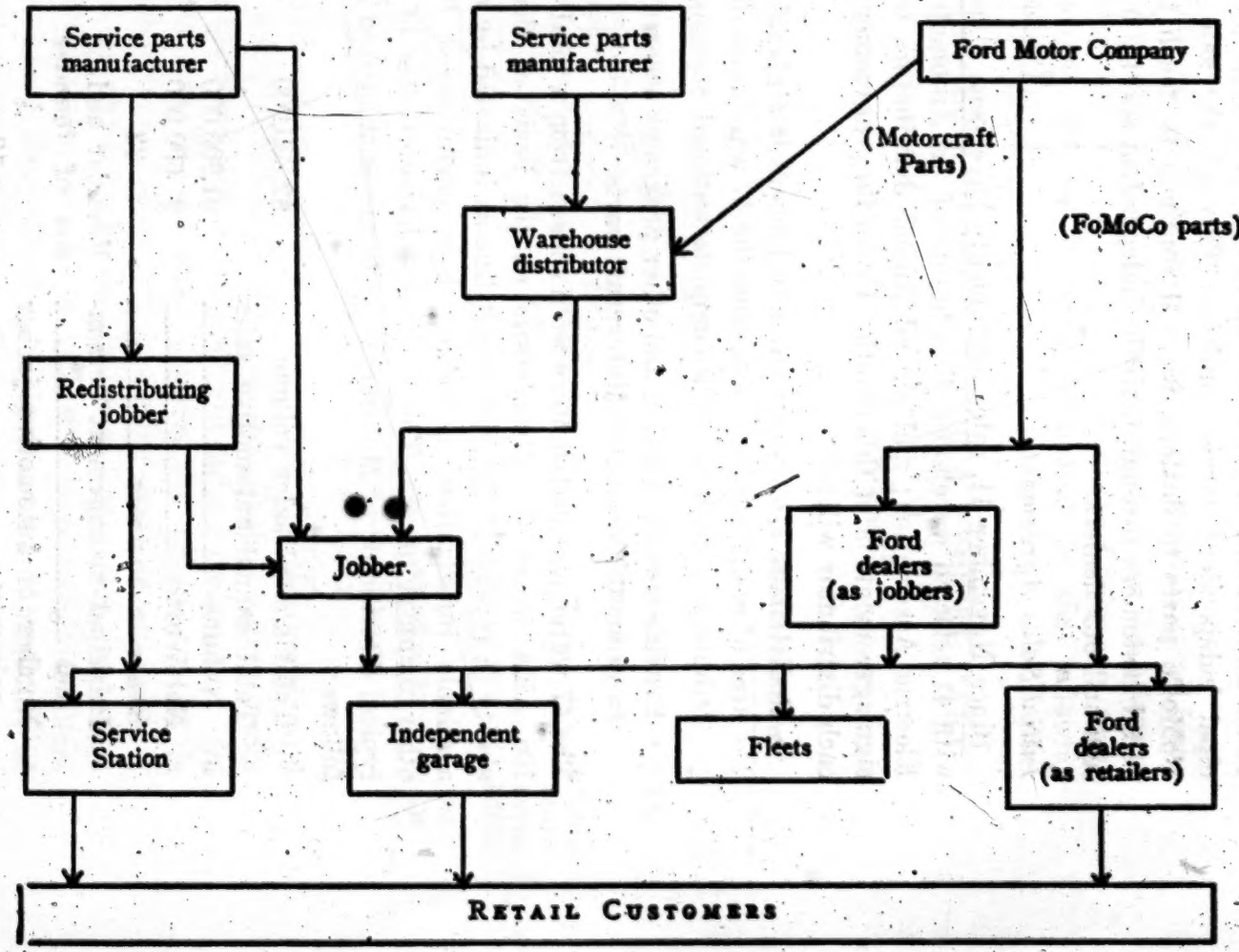


Exhibit G-7

Exhibit G-7

As indicated on this chart, the Ford Motor Company, through the Motorcraft program, will sell through warehouse distributors to jobbers, who in turn sell to the principal independent service outlets. Through the sale of FoMoCo parts to dealers, we will continue to reach the retail customers through both the independent service outlets and our dealers.

Initial Sales Agreements:

Since November 11, sales agreements have been signed with 41 selected warehouse distributors of the Automotive Electric Association; and six additional distributors will sign agreements later this month. Under these agreements, each distributor will:

- Redistribute Motorcraft parts to jobbers in a specified area of responsibility. Together the 47 warehouse distributors provide us with complete national coverage.
- Provide service training and other programs necessary to promote the sale of Motorcraft parts.

The 47 warehouse distributors were chosen from a total of 108 AEA warehouse distributors on the basis of their ability to represent the Motorcraft line as indicated by all available information, including their performance for other manufacturers. The principal characteristics of a typical distributor of Motorcraft parts are summarized as follows:

Total annual sales volume	$2,200,000
Total annual automotive sales volume	$1,900,000
Net Worth	$ 600,000
Years in business	33
Principal management personnel	Founder and/or son of founder
Number of automotive jobber salesmen	10
Number of jobber accounts	200

Exhibit G-7

Prices and Profits:

The sale of Motorcraft parts will necessarily entail lower selling prices for Ford Motor Company than the prices of comparable FoMoCo parts. Hence, the Company's profit margins will be lower as indicated in the following tabulation:

PRICES AND PROFITS FOR A TYPICAL PART SOLD UNDER FOMOCO AND MOTORCRAFT BRANDS

(Voltage Regulator)

FoMoCo Part	Sold by Dealer		Motorcraft Part	
	At Retail	At Whsle.		
Suggested list price	$8.65		Suggested list price	$ 8.65
Suggested wholesale price to:			Suggested wholesale price to:	
Service stations		$ 5.80(a)	Service stations	$ 5.80(a)
Independent garages ...		5.62(a)	Independent garages	5.62(a)
Fleets		5.19(a)	Fleets	5.19(a)
Dealer net price	5.19		Suggested jobber net price ..	3.89(b)
Jobber net price		3.89	Warehouse distributor net price	3.02
Company accounted profit	2.15	.95	Company accounted profit ...	.24

(a) Alternative suggested prices shown in Ford Division pricing publications.
(b) Suggested on basis of usual trade channel discounts.

Although the suggested list prices for Motorcraft and FoMoCo parts will be identical, the effective selling prices for the Ford Motor Company will differ substantially. On parts sold through Ford dealers, the effective price is Dealer Net or Jobber Net, depending on whether the part is sold at wholesale by the dealer and therefore subject to Jobbing Incentive; for a typical voltage regulator illustrated here, these effective selling prices would be $5.19 and $3.89, respectively. The effective selling price of a Motor-

craft part, however, would be Warehouse Distributor Net, or $3.02 in this example.

In general, the Warehouse Distributor Net prices for Motorcraft parts will be established at FoMoCo Jobber Net prices, less 20 per cent discount An additional three per cent discount from Warehouse Distributor Net prices will be allowed in certain cases where proper servicing of a part requires specialized training.

Because of the lower selling prices of Motorcraft parts, Company profit margins will be correspondingly lower than those available on FoMoCo parts. In the example shown here, the Company accounted profit of $.24 on a Motorcraft part would compare to a Company accounted profit of $2.15 or $.95 on a FoMoCo part, depending on whether Jobbing Incentive is paid. Although we have no present basis for estimating the probable substitution of Motorcraft parts in the market for FoMoCo parts, it is apparent that the financial success of the Motorcraft program depends upon keeping substitution at very low levels.

Product Offerings:

In the report of the Parts and Service Study Group, it was pointed out that "the profit potential from the sales of parts to outside distributors must generally come at the point of manufacture," and that profits on sales of parts purchased from outside vendors would be less attractive. Our subsequent investigations have confirmed this conclusion.

The consequence of this fact is that the profitable market potential for Motorcraft parts is concentrated primarily in those lines manufactured within the Company. The extent of this market potential in relation to the total parts market for Ford vehicles is illustrated on the next chart:

ESTIMATED 1960 SALES VOLUME FOR FoMoCo PARTS
BY TYPE OF PART
(Millions of dollars at dealer net prices)

Type of Part	1960 FoMoCo Volume (000,000)
Competitive parts manufactured by the Company:	
Ignition and starting system components	$ 6.7
Carburetion system components	0.5
Engine, transmission, and chassis components	12.3
Glass	5.6
Total	$ 25.1
Competitive parts not manufactured by the Company:	
Spark plugs, batteries, and oil filter elements	$ 18.4
Bearings	14.8
Gaskets and oil seals	11.5
Engine, transmission, and chassis components	83.1
All other	38.7
Total	$166.5
Captive parts	158.9
Total 1960 FoMoCo sales volume	$350.5

This chart summarizes the estimated 1960 FoMoCo sales volume by major groups of parts. Of total parts sales of $350.5 million, only $25.1 million involves competitive parts which are sourced inside the Company. It is this relatively small group of parts which represents the principal market potential available to the Company for profitable sales through non-dealer channels.

It appears that a substantial number of items now sourced outside the Company are closely related, in terms of manufacturing techniques to parts now sourced inside

the Company. We are exploring with the manufacturing divisions the feasibility of sourcing such parts inside the Company so as to increase the number of items which could be sold profitably through the Motorcraft program.

Sales and profit objectives for 1960

The following chart summarizes the sales and profit objectives which are proposed for all Associated Products Marketing programs for 1959 and 1960.

SALES AND PROFIT OBJECTIVES FOR 1960
(Millions of dollars)

	Total	Manufactured parts	Purchased parts
Sales of Motorcraft parts to warehouse distributors:			
Initial lines (principally ignition, carburetion, and starting system components)	$7.1		
Additional lines to be offered as program progresses	1.0		
Sales of parts to other manufacturers for resale under their own brand name	1.0		
Total gross sales	$9.1(a)	$3.5	$5.6
Incremental net profits before taxes	$1.9	$1.2	$ .7

(a) Excludes sales of Carlite glass, estimated at $5.5 million by Glass Division.

Total sales for 1960 are estimated at $9.1 million, and are expected to consist principally of Motorcraft parts sales through warehouse distributors. However, we also expect to sell $1.0 million of parts to other manufacturers for resale under other brand names.

Total profits are estimated at $1.9 million. It should be noted that about two-thirds of this profit will be derived

from parts manufactured within the Company, although in sales volume these parts will amount to only about 40 per cent of the total. The parts purchased from outside vendors are included in the program primarily in order to assure complete lines of parts, without which it would be difficult to interest distributors and jobbers in the Motorcraft program.

Of the $9.1 million sales objective, $7.1 million is accounted for by ignition, carburetion, and starting system components, the only lines of Motorcraft parts being offered initially. Assuming no substitution for FoMoCo sales, the sales objective would result in an estimated market penetration increase for the Company of 65 per cent for these lines.

We do not consider these initial sales objectives satisfactory long-term goals even for those lines which will be fully represented in our program. During 1960, the warehouse distributors and their wholesale outlets must exhaust inventories of parts lines being replaced by the Motorcraft line. Also, we will be acquainting the parts trade with the Motorcraft name, and training a field sales force. The sales objective of $9.1 million is believed to be a realistic goal for our first year of operation, in the light of these conditions.

D. Advertising and Sales Promotion Program

The primary objectives of our proposed Motorcraft advertising and sales promotions for 1960 are to develop awareness of the Motorcraft brand name among personnel of service stations, independent repair shops, automotive parts jobbers and large fleet operators; to identify the name with high quality automotive parts; and to give visual evi-

dence to jobber salesmen that their efforts are being supported.

Advertising would start in April, by which time Motorcraft ignition and carburetion parts will be available at over 4000 outlets, and would continue throughout the year.

The proposed trade publication advertising program would cost $168,000 for the nine months from April through December, 1960. This expenditure compares as follows with space expenditures for the first nine months of 1959 by other well known parts manufacturers in the trade papers recommended to carry Motorcraft advertising:

Motorcraft (proposed)	$168,000
Electric Autolite	141,900
Purolator	126,000
UMS-Delco & Rochester	175,000
Carter Carburetor	152,178
Perfect Circle	99,328

In comparing these outlays with the 1960 proposal for Motorcraft, it should be borne in mind that they represent continuing costs of supporting brands that are firmly established in the trade. Several years of more intense coverage may be required to build equal recognition and acceptance for Motorcraft.

In order to secure maximum introductory impact, reprints of the first advertisement, carrying the names of the 47 Motorcraft distributors, would be mailed during April to 150,000 major outlets including all jobbers.

It is proposed at this time to limit sales promotions during 1960 primarily to catalogs, decals and a product presentation for the annual AEA convention in December 1960. If additional promotional activities should appear necessary during the year, supplementary requests will be submitted.

Exhibit G-7

1960 Advertising and Sales Promotion Budget

	1960 Proposed Budget		
	1st 6 Mos.	2nd 6 Mos.	Total
Advertising			
Magazines	$ 75,000	$ 93,000	$168,000
Direct Mail	18,000	—	18,000
Sub-Total	$ 93,000	$ 93,000	$186,000
Sales Promotion			
Catalogs and Price Lists	$ 22,000	$ 6,000	$ 28,000
Decals	2,000	—	2,000
AEA Convention Presentation	—	5,000	5,000
Other	4,000	6,000	10,000
Sub-Total	$ 28,000	$ 17,000	$ 45,000
Total	$121,000	$110,000	$231,000

To carry out the proposed 1960 programs, a total of $231,000 or 2.8% of estimated 1960 sales of Motorcraft brand parts required as shown above and approval of this expenditure is requested.

E. Summary

In summary, the Associated Products Marketing Office has thus far:

- Investigated all major channels of distribution for service parts.

Exhibit G-7

- Initiated a program for selling ignition and carburetion parts and later, other lines to warehouse distributors for resale to jobbers, under the Motorcraft brand.
- Negotiated sales to other manufacturers for resale under their own brand names.

During 1960, these programs should result in sales of $9.1 million, yielding Company incremental profits of $1.9 million.

In addition, during 1960 the Associated Products Marketing Office will continue to explore the possibilities for developing additional programs for major oil and tire companies, chain stores and parts reconditioners.

EXHIBIT G-8

ASSOCIATED PRODUCTS MARKETING REPORT
July 15, 1960

On January 15, 1960, Associated Products Marketing presented to the Marketing Committee its plans for expanding the Company's participation in the service parts market during 1960. The purpose of this report is to review these plans and the progress which has been made in the five months since January 15, and to outline the long range actions necessary to achieve maximum success in penetrating the parts market through non-dealer channels.

Market Analysis

In previous reports, we have reviewed in detail the various major channels of distribution for service parts, and have pointed out that there are three basic systems of distribution available to a vehicle manufacturer:

1. Directly through vehicle dealers.
2. Through independent warehouse distributors and jobbers.
3. Through national organizations, such as oil and tire companies and retail chain stores, who have retail service outlets.

Sales to Vehicle Dealers

Parts sales made directly to vehicle dealers yield the greatest profit margins and can be limited to parts for the manufacturers own vehicles. This channel of distribution presently accounts for roughly half of all parts volume and will continue to be a major channel of distribution, particularly if the trend toward more complexity in vehicle design

should continue: Ford Motor Company is reaching this channel of distribution with the FoMoCo brand.

Sales to Warehouse Distributors and Jobbers

At the present time, warehouse distributors and jobbers, the second basic system of parts distribution, are the major source of parts used by service stations and independent garages, the retail outlets which the Motorcraft program was designed to reach.

Parts sales through this channel are presently of almost equal importance to sales through vehicle dealers. From the standpoint of a vehicle manufacturer, these sales yield lower unit profit margins than do sales to vehicle dealers, and in general, it is necessary to provide full lines of parts applicable to all makes of vehicles.

The major exceptions to the full line requirements are the Automotive Electric Association warehouse distributors and jobbers. These outlets historically have specialized in parts manufactured by original equipment sources who generally do not manufacture full lines for all vehicles. Because Ford does not yet manufacture full lines of parts, it was necessary to introduce the Motorcraft line through these outlets.

Sales to National Organizations with Retail Service Outlets

There are three types of national organizations with retail service outlets:

- Retail chain stores (Sears, Wards, Western Auto)
- Retail specialty shops (Midas Mufflers)
- Oil and Tire Companies (Standard Oil, Firestone)

Exhibit G-8

An increasing share of the total automotive market is being served by these national organizations and this trend can be expected to continue, particularly in connection with tune-up and minor repair work.

As a consequence, the relative importance of the conventional parts distributor and jobbers as a channel of distribution can be expected to decline. This development is not unlike the changes in distribution patterns which have occurred in recent years in the food and appliance industries.

General Motors has recognized this trend and is aggressively promoting the distribution directly to oil and tire companies of GM ignition and carburetion tune-up parts and shock absorbers for all makes of vehicles (see Exhibit I). On the West Coast, Richfield Oil Company distributors have been active as United Motors Service distributors for several years and within the last few months, the Firestone and Goodyear warehouses have also become UMS distributors for Delco-Remy parts for all make vehicles. Chrysler has also announced its intentions to produce parts for all make vehicles.

Shown below are the major oil companies which either have their own warehouses through which they are currently distributing such items as spark plugs, batteries and filters or which have arrangements with tire company jobbers or tank wagon distributors to distribute such parts to their stations:

Oil Companies with own TBA or Exclusive Warehouses[a]

	No. Serv. Station Outlets
Mobil	20,000
Cities Service	10,200
Sun	7,300
Pure	16,000
Gulf	35,000
Total	88,500

Exhibit G-8

Oil Companies with Tire Company-Tank Wagon Distributor Arrangements for Distributing TBA Items

Shell	23,000
Texaco	35,000
Atlantic	8,500
Phillips	18,190
Continental	8,000
Sinclair	18,000
Total	110,690

(a). Generally purchase high volume items directly from manufacturer.

Although these warehouses are presently handling only such parts as spark plugs, batteries and oil filters, it is only natural that the oil companies should be looking for opportunities to expand the usage of these systems of distribution to such items as ignition and carburetion tune-up parts and will do so whenever such action is economically feasible.

The long range alternatives available to Ford Motor Company are:

1. Continue to manufacture parts only for Ford Motor Company vehicles and, in effect, abandon the national organizations, as a channel of distribution, to General Motors and other manufacturers willing and able to manufacture full lines of parts for all make vehicles.

2. Manufacture full lines of parts for all make vehicles but distribute these parts only through conventional warehouse distributor and jobber channels.

3. Manufacture full lines of parts for all make vehicles and distribute these parts both through conventional distributor and jobber channels and through national organizations in direct competition with General Motors. With such a program, we would have maxi-

mum flexibility and be in a position to take full advantage of the changes taking place in parts distribution methods.

While the third alternative is the only one which appears to offer the possibility of maximizing the Company's long run penetration of the parts market through channels other than vehicle dealers, it requires:

1. Emphasis by the Company's manufacturing divisions on the design and manufacture of full lines of those types of service parts in which national organizations are interested, such as, for example, ignition and carburetion tune-up parts and shock absorbers.
2. Simplification of parts lines to minimize the number of different parts required to service all make vehicles.
3. Continued promotion of the Motorcraft brand name in a manner which will not identify the Motorcraft name solely with parts for Ford Motor Company vehicles.

REVIEW OF CURRENT ACTIVITIES

Associated Products Marketing's current activities have been concentrated on the specific objectives which were presented to the Marketing Committee on January 15, 1960. These objectives and the progress which has been made with respect to the long range objective of manufacturing parts for all makes of vehicles and the distribution of these parts through both conventional jobber channels and through national organizations may be summarized as follows:

Exhibit G-8

1. *The establishment of a system of distribution for Motorcraft ignition and carburetion parts.*

Our original plan, as presented to the Marketing Committee, was to distribute Motorcraft ignition and carburetion parts to approximately 45 contract warehouse distributors, each with a specified area of responsibility, who in turn would collectively redistribute to an estimated 4,000 contract jobbers.

At the present time, there are 52 Motorcraft warehouse distributors, all members of the Automotive Electric Association, who in turn have entered into agreements with approximately 1,000 jobbers for the distribution of Motorcraft parts. Based on market representation plans which are being developed by the warehouse distributors, there will be over 3,000 jobbers distributing Motorcraft parts by January 1, 1961.

The present line of Motorcraft parts consists of major ignition and carburetion parts for Ford family vehicles and is directly competitive with parts lines which have been distributed through the same system of distribution by several other manufacturers, notably the Holley Carburetor Company. However, the present line of Motorcraft parts differs from the Holley line in the following respects:

1. The present Motorcraft line does not include individual carburetor components. Although these component parts are presently available in Motorcraft repair kits, they will be added to the Motorcraft line as individual parts within 60 days.

2. The Holley line includes carburetion parts for American Motors, International Harvester, GMC, Dodge and several other vehicle manufacturers. These parts are not included in the present Motorcraft line.

Exhibit G-8

3. The Motorcraft line includes field coils and generator and starter end plates which are not included in the Holley line, although available from other manufacturers.

The additional vehicle coverage of Holley is adversely affecting the promotion of the Motorcraft line. However, this disadvantage can be overcome either by providing broader vehicle line coverage in the Motorcraft line or by the addition of Ford vehicle parts lines which are not available from Holley.

2. *Advertising and promotion of Motorcraft brand name.*

The advertising and promotion program presented to the Marketing Committee consisted of:

- Monthly advertisements in major jobber, service station and fleet trade publications beginning in April.
- A direct mail program during April to introduce the brand name Motorcraft to 125,000 jobbers, service stations and fleets.
- A product presentation to the annual meeting of the Automotive Electric Association in December.

As planned, advertising of the Motorcraft line in trade publications began in April and at the same time, the brand was introduced through direct mailing of copies of the advertisements to 13,200 jobbers, 40,000 service stations, 10,000 independent garages and 57,000 fleets. For 1960, this program will cost $186,000.

Exhibit G-8

3. ***The development of additional lines to be marketed under the Motorcraft brand name.***

In the April 16, 1959 report of the Parts and Service Study Group, it was recommended that a Ford brand name be chosen which could be used for merchandising parts for all makes of vehicles. It was pointed out, both in this report and in the January 15, 1960 report of Associated Products Marketing, that broad vehicle coverage was of major importance to most jobbers and distributors and of prime importance to the oil and tire companies supplying parts to service stations. During the last few months, General Motors has taken advantage of the broad vehicle line coverage of their UMS program to include the Firestone warehouses which service the majority of Shell and Texaco stations in their distribution system and is aggressively promoting similar programs with the other major oil and tire companies.

For these reasons, in developing additional Motorcraft product lines, emphasis is being given to lines which are or can be manufactured within the Company and which can apply to all or most makes of vehicles.

At the present time, programs are being actively developed for the marketing of the following additional lines of parts:

a. *Voltage Regulators*

The Hardware and Accessories Division is presently completing engineering studies of the feasibility of manufacturing voltage regulators for all makes and models of cars and trucks. It appears that with six voltage regulators in addition to the twenty-seven in the present Motorcraft and FoMoCo lines, all major vehicles makes can be serviced with

a Ford manufactured regulator. Two of these additional regulators can be available for sale by December 1, 1960 and the four remaining by February 4, 1961. In order to meet these schedules tooling decisions will be required four months prior to the introduction date.

b. *Shock Absorbers*

The Engineering Staff of the Hardware and Accessories Division is developing a line of standard 1 inch diameter shock absorbers which would provide coverage of virtually all makes and models of domestic passenger cars. This line would include 13 shock absorbers for Ford and Mercury cars from 1949 through 1960 compared to 56 shock absorbers presently being marketed under the FoMoCo brand. Approximately 20 additional shock absorbers would provide complete coverage for all General Motors and Chrysler cars and some of the other minor car lines. This line would be at least as extensive as the Delco line of shock absorbers being marketed by General Motors. In addition, the Hardware and Accessories Division plans to develop a premium line of shock absorbers for all vehicle makes and models similar to the Monroe "Load-leveler" line. With both a standard and premium line covering all vehicle makes and models, the Motorcraft line of shock absorbers would be fully competitive, product wise, with any of the independent manufacturers of shock absorbers and would be superior to the present Delco line.

According to present plans, the standard line of shock absorbers for Ford vehicles would be introduced late in 1960, for non-Ford vehicles as early in 1961 as possible and the premium line at a later date, providing initial sales experience of the standard line indicates the desirability of

the addition of a premium line. Although shock absorbers generally are being heavily advertised and promoted, it is not planned to engage in major advertising or promotional programs for the Motorcraft line of shock absorbers during the first months of 1961. Instead, it is planned to establish a distribution system and to test the effectiveness of advertising and other promotional activities in selected markets.

Final decisions on both the premium line and major promotional activities would be deferred until after an adequate distribution system has been developed and promotional activities tested.

c. *Automatic Transmission Parts*

The Transmission and Chassis Division and Associated Products Marketing are jointly developing a program for marketing automatic transmission parts for Ford Motor Company vehicles under the Motorcraft name and through present Motorcraft distributors wherever possible. This program will involve, to the fullest extent possible, the use of repair and tune-up "kits" similar to those currently being marketed for carburetors.

In addition to marketing a full line of competitive automatic transmission parts for Ford family vehicles, it is planned to market at a later date similar lines of parts for all other make vehicles under the Motorcraft brand. Including parts for other make vehicles would provide coverage equal to that of the major independent brands and is probably essential to the successful marketing of any lines of automatic transmission parts through non-dealer channels.

Exhibit G-8

d. *Other Lines*

In addition to these lines for which programs are being actively developed, there appears to be potential in such lines as, for example:

Line	Manufacturing Division	1959 Ford Volume (000)	Est. FoMoCo Penetration
Universal Joints	T & C	$1,023	25%
Brake Parts, excluding Shoes & Linings	H & A	2,456	15%
Electric Motors	H & A	159	40%
Oil and Water Pumps	E & F	409	30%

Active study and development of these lines will be undertaken at the earliest possible date.

4. *Motorcraft sales and profit objectives for 1960.*

It was originally anticipated that sales of parts by Associated Products Marketing would reach a total of $9.1 million during 1960, including $8.1 million in Motorcraft brand parts and $1.0 million in private brand sales. Although actual sales will fall short of this amount, the sales rate is increasing and it appears the annual rate of sales will be approaching this level by the end of 1960.

The following chart shows sales performance thus far and a forecast for the balance of the year:

SALES OF MOTORCRAFT PARTS

$(000)

Actual Sales 1960	Motorcraft	Private Brand	Total
January	$—	$ 14	$ 14
February	241	25	266
March	397	32	429
April	212	17	229
May	103	27	130
June	130	27	157
Total Actual	$1,083	$142	$1,225

Exhibit G-8

Forecast	Motorcraft	Private Brand	Total
July	$ 175	$ 40	$ 215
August	250	45	295
September	350	50	400
October	350	60	410
November	400	70	470
December	500	80	580
Estimated 1960 Total Sales	$3,108	$487	$3,595
Estimated Annual Sales Rate as of December, 1960	$6,000	$960	$6,960

In establishing the original sales objective, it was anticipated that initial stocks of Motorcraft parts would be shipped to warehouse distributors in January rather than in late February and March. Further, the existing warehouse and jobber inventories of competitive merchandise were underestimated. These factors seriously affected sales volume during the first half of 1960 but will be of lesser importance during the second half and of no importance by 1961.

The bulk of Motorcraft sales thus far have been at the expense of Holley Carburetor Company which is intensifying its efforts to sell ignition and carburetion parts through the same AEA warehouse distribution and jobbers that are handling Motorcraft. Since the introduction of Motorcraft, Holley has been using the slogan, "Identical Twins," referring to "Holley Original Equipment Carburetors" and "Holley Pep Carburetors," in its advertising in an apparent effort to continue to equate Ford and Holley in the minds of warehouse distributors, jobbers and the trade generally.

Total sales of Motorcraft parts through June were at a substantially higher rate than were sales of voltage regu-

lators and other parts by the Hardware and Accessories Division to Holley during 1958 and 1959. Slightly lower sales of the types of parts previously being sold to Holley have been more than offset by increased sales of parts lines which were not being sold by Ford to Holley as shown below:

	Estimated Annual Rate of Gross Sales (At Distributor Prices)		
	Sales to Holley(a)	Motorcraft Sales(b)	Increase (Decrease)
Parts previously sold to Holley	$0.9	$0.7	$(0.2)
Parts not previously sold to Holley	—	1.9	1.9
Total	$.09	$2.6	$ 1.7

(a) Based on actual sales to Holley Carburetor increased to the Distributor price level.

(b) Based on actual Motorcraft sales February-June, 1960.

It was originally estimated that Company profits for 1960 would be increased by $1.9 million as a result of this program. Based on the sales forecast shown above, it now appears that Company profits will be increased by $340,000. This relatively low profit results primarily from the lower than anticipated sales volume. In addition, Motorcraft sales included a high proportion of purchased items which are required to round out the Motorcraft line but on which the Company generally realizes little or no profit, as shown by the following analysis of sales mix and gross profit during the period from January through May 1960.

Exhibit G-8

	Percent of Total Sales	Gross Profit as a % of Sales
Motorcraft Brand		
Manufactured Parts	22%	40%
Purchased Parts:		
Distributor Points	29%	45%
All Other	37%	4%
Private Brand Sales		
Manufactured Parts	7%	38%
Purchased Parts	5%	38%
Total	100%	28%

The manufacturing divisions are taking action to either manufacture or resource to other vendors the low profit purchased items for the Motorcraft line which accounted for 37% of total sales volume during the first 5 months of 1960. These actions, together with the plans for adding lines will be reflected in improved future profit margins.

SUMMARY

In summary; since January 15, 1960, Associated Products Marketing has completed the development of warehouse distributors as primary outlets for Motorcraft parts and has made substantial progress towards the establishment of jobbers as secondary outlets. The Motorcraft brand name has become established and is being publicized. Although sales volume thus far is below original expectations, volume is increasing and should approach anticipated levels by the end of 1960.

Short range plans for expanding the Motorcraft program are directed primarily toward the completion of the

launching of the Motorcraft ignition and carburetion program through AEA warehouse distributors and include:

a. The appointment of additional Motorcraft jobbers by the warehouse distributors.

b. The strengthening of the Motorcraft line of ignition and carburetion parts for Ford vehicles through the inclusion of individual component parts not currently offered.

c. Holding a Distributors' Council here during October.

d. Presenting the program for 1961 to all Motorcraft distributors during the annual meeting of the Automotive Electric Association in Chicago during December.

While these actions will provide maximum penetration of the ignition and carburetion parts market through AEA warehouse distributors and will tend to enhance the value of the Motorcraft brand name, they will not be sufficient to assure maximum long range penetration of the parts market through non-dealer channels. For this reason, the long range plans of Associated Products Marketing are directed primarily toward:

1. Expanding within limits of policy, Ford items offered through AEA distributors.

2. The development of programs for marketing lines of "all makes" Motorcraft items such as shock absorbers, voltage regulators and automatic transmission parts through AEA distributors or other channels.

3. The development of a program specifically designed to cover the sale of Motorcraft parts to major oil companies which, to be successful, will probably require a broad line of various types of parts for all make vehicles rather than single lines, such as shock absorbers or voltage regulators.

Subsequent semi-annual status reports will cover our progress in each of these areas.

Exhibit I

Vehicle Line Application of G.M. Service Part Lines Being Distributed Through Oil and Tire Companies

Brand Name	Product Line	G.M.	Ford	Chrysler	American Motors	Studebaker
Delco-Remy	Contact Sets	x	x	x	x	x
"	Condensers	x	x	x	x	x
"	Distributor Caps	x	x	x	x	x
"	Ignition Coils	x	x	x	x	x
"	Rebuilt Generators	x			x	x
"	Voltage Regulators	x	x	x	x	x
"	Brush Sets—Generator	x	x	x	x	x
"	Switches, Headlight Dimmer	x	x	x	x	x
"	Switches, Stop Lamp	x	x	x	x	x
"	Resistance Units	x			x	x
"	Rotors	x	x	x	x	x
Packard Cable	Ground Strap	x				
"	Battery Cables	x	x	x	x	x
"	Ignition Cable Sets—Standard	x	x	x	x	x
"	Ignition Cable Sets Interference Suppression	x	x	x	x	x
Rochester OK Kits	Carburetor Tune-up Kits	x	x	x	x	x
Harrison	Thermostats	x	x	x	x	x
Delco Moraine-Hydraulic Brakes	Master Cyclinders	x				
"	Wheel Cyclinders	x				
"	Repair Kits—Master Cylinders	x				
"	Repair Kits—Wheel Cyclnders	x				
"	Swtches, Stop Light	x				
"	Brake Hose	x				
New Departure-Hyatt	Inner Bearing—Front Wheel	x	x	x	x	x
"	Outer Bearing—Front Wheel	x	x	x	x	x
Superide (Delco)	Shock Absorbers	x	x	x	x	x

EXHIBIT G-9

FORD MOTOR COMPANY

Executive Communication

December 1, 1960

TO: Members of the Marketing Committee

SUBJECT: *Brand Policy for Parts Sold by Ford Motor Company*

For many years, the published policies of the Company have provided that all production and service parts for Ford Motor Company vehicles carry the approved "FoMoCo" brand identification "wherever feasible." Because of potential piece cost penalties and vendor resistance, however, many important parts still carry prominent vendor brand identification on both production and service parts. Illustrations of non-Ford branding of production and service parts are shown in Exhibit I.

A comparison of the branding policy of Ford and GM with respect to production-installed parts reveals that in all cases the GM parts bear the brand name of a GM division or subsidiary. Ford, on the other hand, uses Ford, FoMoCo, and supplier brands on some parts and no identification on others. A comparison of the branding practice of Ford and Chevrolet on several high volume parts is shown in Exhibit II.

Our failure to require that vendor brands be eliminated from Ford Motor Company parts has assisted our vendors in their cultivation of the aftermarket through competing wholesale channels with the claim that their brand is the "genuine original equipment" brand for Ford Motor Company vehicles. The value to vendors of being able to exploit their brand as an original equipment component on a well-

accepted product is reflected in their reluctance to remove it. When vendors control the brand on a part and also participate in the aftermarket, their pricing practices tend to place limitations upon both the purchase and resale prices of such parts for service by Ford Motor Company. This restricts Ford's pricing flexibility and may limit Company profits.

Our market tests and research studies show that the lack of an exclusive Ford Motor Company brand on such key components as spark plugs and fuel pumps handicaps our dealers in their efforts to sell "genuine" Ford parts to the wholesale trade in competition with jobbers selling identical components offered by our vendors. We believe that, in the long run, our dealers' wholesaling of service parts can be strengthened by having all original equipment parts for Ford Motor Company cars and trucks distributed under Ford Motor Company controlled brands.

To accomplish this objective, we propose to replace vendor brand identification with uniform Ford Motor Company identification on production and service parts unless the original equipment component is to be merchandised under another brand (e.g. Cummins engines or Timken axles). In some cases, this change can be made with no cost penalty. In others, such action can precipitate changes in the cost of production parts. Where a cost penalty to production of $1,000 or more annually is involved, a proposal will be submitted to the car and truck division General Managers for approval.

We recommend that the name "FoMoCo" in block letters be used as the primary Company brand for genuine parts, including Mercury, Lincoln, and Comet, and that such parts be distributed exclusively through Company franchised dealers. In merchandising displays, the name "FoMoCo"

Exhibit G-9

would appear in red block letters within the familiar blue oval as indicated in Exhibit III.

In adopting "FoMoCo" as the primary brand for genuine Company parts, we recognize that certain parts that readily lend themselves to "all-make" application (viz. hoses, cables, filters) are not easily merchandised in the wholesale market when they have the same brand name as "genuine" parts exclusive for a single make of vehicle. Our dealers have repeatedly brought to our attention instances of where the FoMoCo brand on this type of part represented a handicap to wholesale sales.

The Divisions proposes, therefore, to merchandise universal "all-make" parts under a new "Rotunda" brand to be distributed exclusively through Ford and Lincoln-Mercury dealers. Initially, the Rotunda service parts will be well identified as products of Ford Motor Company and the production parts involved will be branded, where practicable, with Rotunda rather than FoMoCo. The Rotunda brand is already being used on our new "full-flo" depth type oil filter, and we propose to extend its application to other parts with all-make applications. If our dealers are able to merchandise existing lines of universal parts successfully under the Rotunda brand, we can extend the "all-make" items offered under this program wherever it is economical or feasible to do so. The proposed Rotunda brand is illustrated in Exhibit IV, and examples or parts that can be marketed under the Rotunda brand are shown in Exhibit V. We are not proposing any special additional advertising or promotional expenditures to promote the Rotunda brand at this time, although eventual acceptance of the brand might justify such added effort at a later date.

Exhibit G-9

We decided to use Rotunda rather than Motorcraft for the all-make line of parts to be made available to Company franchised dealers for the following reasons:

1. Our proposed plan will allow the Company to sell original equipment parts under FoMoCo or Rotunda brands only to the Company's franchised vehicle dealers for further distribution.

2. If the Motorcraft parts were offered as an original equipment line to franchised dealers, Motorcraft jobbers would make even greater efforts to cultivate our dealers as wholesale customers with resultant loss of profit to the Company on parts we are currently selling directly to dealers.

3. Our proposed plan offers greater flexibility in developing product specifications for the Motorcraft and Rotunda lines; i.e., Motorcraft designs need not be restricted to specifications necessary for the Rotunda original equipment line. Thus, the Motorcraft line may be simplified in some parts to better meet the requirements of jobbers and the service station market.

4. By continuing to offer Motorcraft as a non-original equipment brand, we will be in a position to sell Motorcraft parts directly to oil companies without importantly affecting established relationships with franchised dealers.

In summary, our proposed branding policy will be directed toward the following objectives:

Exhibit G-9

1. Elimination of vendor brands on production and service parts.
2. Sale of original equipment brands by the Company only to franchised Company vehicle dealers for further distribution.
3. Adoption of uniform Company brands for production parts and the genuine parts sold through Company dealers; i.e.:
   - FoMoCo for parts unique to Company vehicles
   - Rotunda for parts with "all-make" applications
4. Use of different brands, such as Motorcraft and Car-Lite, for parts sold through channels other than Company dealers.

The Finance Staff, Public Relations and Advertising Staff, the Purchasing Staff, the Office of the General Counsel, and the Vice President—General Products Group have reviewed this recommendation as it relates to their respective areas of responsibility.

/s/ L. A. Iacocca
L. A. Iacocca

/s/ B. D. Mills
B. D. Mills

Concur: /s/ J. O. Wright
J. O. Wright

• • • • •

Exhibit G-9

EXHIBIT V [TO EXHIBIT G-9]

EXAMPLES OF PARTS THAT CAN BE MARKETED UNDER THE ROTUNDA BRAND

A—FoMoCo parts which are now offered as universal "all-make" lines:

- Oil Filters
- Flexible Radiator Hose
- Battery Cables
- Fuses
- Thermostats
- Radiator Caps
- Sealed Beam & Miniature Bulbs
- Speedometer Cable Core Kits
- Wire Terminals
- Brake Wheel Cylinder Cups
- Directional Signal Flashers
- Voltage Regulators
- Batteries
- Universal Joint Kits
- Fan Belts

B—Other parts which through *redesign* can be marketed under the Rotunda brand:

- Gas Filters
- Points
- Rotors
- Shock Absorbers
- Bearings
- Carburetor Repair Kits
- Distributor Repair Kits
- Brake Linings
- Rings
- Windshield Wiper Arms & Blades
- Spark Plugs
- Condensers
- Electrical Switches

EXHIBIT G-12

CONFIDENTIAL

To: Members of the Integration Committee

I. Purposes of Presentation

In order to improve on the profit commitments contained in its profit plan approved by Mr. Ford and Mr. Breech in January, 1960, the Hardware and Accessories Division has been examining additional sources of profit improvement, including integration, product realignment, sourcing changes, and cost reduction programs.

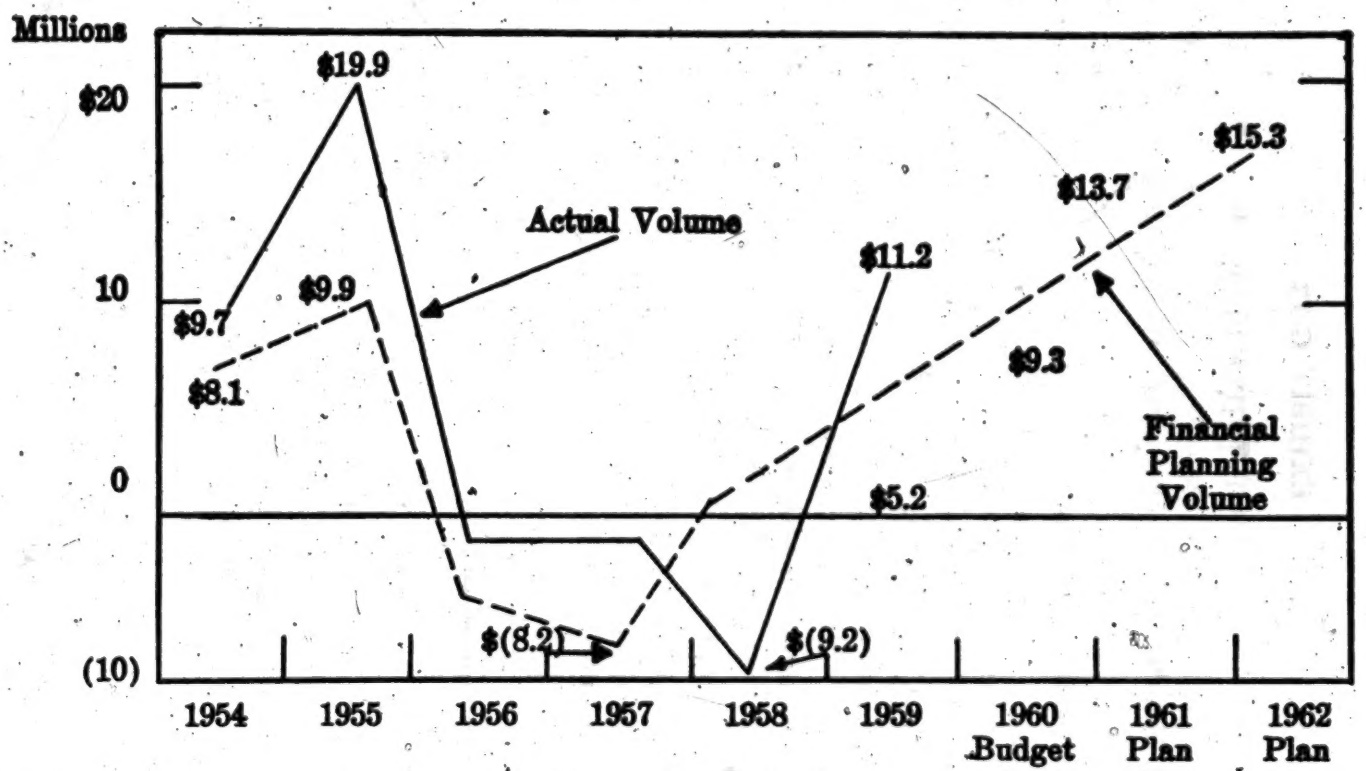
These examinations have disclosed an area for profit improvement of significant importance. Concurrently, the Division, at the request of Mr. Irving A. Duffy, has been working closely with Central Finance Staff on specific assignments made by the Integration Committee.

Accordingly, Mr. Duffy has requested that the Hardware and Accessories Division present this proposal to the Integration Committee for consideration.

Before discussing the specific proposal, however, we believe it appropriate to first acquaint you with the financial background, the present status and the outlook of the Hardware and Accessories Division. These data represent, for the most part, a brief summary of the Division's 1960 Profit Plan submitted to Mr. Ford and Mr. Breech in January.

II. Hardware and Accessories Division Approved Profit Plan

Profits Before Taxes—At Actual and Financial Planning Volume—1954—1962



After-Tax Return on Assets									Objective
Actual Volume	13%	19%	(2)%	(1)%	(4)%	5%			
Fin. Plan. Vol.	11%	12%	(3)%	(4)%	—	3%	5%	7%	9%	11%

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At actual volume, the Hardware and Accessories Division's profits before taxes reached a peak of $19.9 million in 1955. In each of the years 1956 to 1958 losses were incurred. Profits in 1959 were $11.2 million, an improvement of $20.4 million from the $9.2 million loss incurred in 1958. At Financial Planning Volume, profits in 1955 were $9.9 million and in 1959 $5.2 million. Returns on assets employed, at Financial Planning Volume, were 12% in 1955 and 3% in 1959.

The Division has planned profit improvements totaling $10.1 million in 1960 through 1962. Profits of $15.3 million planned for 1962 will produce a return on assets employed of 9%, compared with the Division's objective return of 11%. The improvements required to reach this level of profits are described on the following page.

The specific factors contributing to the net profit increase of $10.1 million from 1959 to 1962 are indicated by year on the following table:

	Profit Increase/(Decrease) From Preceding Year				Total Improvement
	1959	1960	1961	1961	1959-1962
			(Millions)		
Profit Increases					
Increased Sourcing		$ 1.7	$ 1.4	$ 1.5	$ 4.6
Motorcraft Program		0.2	0.7	—	0.9
Product Line Changes		0.5	0.7	—	1.2
Labor and Overhead					
Normal		2.5	0.8	—	3.3
Launching		0.7	0.1	—	0.8
Direct Material Costs		1.4	0.2	—	1.6
Accelerated Depreciation		0.6	0.5	0.4	1.5
Total Increases		$ 7.6	$ 4.4	$ 1.9	$13.9
Profit (Decreases)					
Transfer Price Changes		$(1.4)	$(0.1)	$ —	$(1.5)
Vehicle Product Changes		(1.3)	(0.1)	—	(1.4)
Unrecovered Economics		(0.3)	(0.3)	(0.3)	(0.9)
All Other		(0.5)	0.5	—	—
Total (Decreases)		$(3.5)	$ —	$(0.3)	$(3.8)
Net Changes		$ 4.1	$ 4.4	$ 1.6	$10.1
Profit	$5.2	$ 9.3	$13.7	$15.3	
Percent Return	3%	5%	7%	9%	

Exhibit G-12

In 1960, profit increases of $7.6 million are planned. Additional profit improvements totaling $4.4 million are planned in 1961 and $1.9 million in 1962. The total increases of $13.9 million for the three-year period result from increased sourcing ($4.6 million); Motorcraft Program ($0.9 million); product line changes at Sandusky ($1.2 million); reduced labor and overhead and launching costs ($4.1 million); lower direct material costs ($1.6 million); and a reduction in accelerated depreciation ($1.5 million).

These profit improvements are partially offset by profit decreases totaling $3.8 million for the three-year period. Profits will be lower by $1.5 million because of the transfer price reduction on distributors and the completion of programmed transfer price reductions on starters, generators, and heaters. No additional transfer price reductions are planned. Other reductions include the lower profit margin on Falcon parts, $1.4 million, an increase in economic cost levels not recovered in prices, $0.9 million.

The Division fully expects to meet the commitments contained in its approval profit plan. For the first half of 1960, profits are forecasted to be $0.8 million higher than budget, primarily because of improvements in manufacturing cost performance. These commitments, however, represent all of the profit improvement the Hardware and Accessories Division believes it can realistically project on its present basis of operations. To reach its objective return of 11%, the Division must either solve the problems of profit changes not controllable by the Division or find sources of additional revenue not affected by these problems.

Exhibit G-12

Motorcraft Program

The Division's profit plan includes $900,000 added profits from the Motorcraft Program. The Associated Products Marketing Office, Ford Division, has been given the marketing responsibility for this program, and sales agreements have been signed by 47 Central Distributors of the Automotive Electric Association to sell carburetor and electrical components and kits under the Motorcraft name. Shipments began in February, 1960.

The following table summarizes the estimated annual sales and profits that the Hardware and Accessories Division will realize from this program:

	Purchased Parts	Manufactured Parts	Total
		(Millions)	
Sales	$4.0	$2.1	$6.1
Manufacturer's Cost	3.4	1.3	4.7
Incremental Gross Profit	$0.6	$0.8	$1.4
Assessment from Ford Division for Marketing and Advertising Expenses	0.3	0.2	0.5
Net Incremental Profit	$0.3	$0.6	$0.9
After-Tax Return on Assets	12%	47%	26%

The full profit potential of an after-market sales program will be realized only if substantially all of the parts to be sold are manufactured by our Division. As shown above, two-thirds of the profit ($0.6 million) will be made on manufactured parts that represent one-third of the sales ($2.1 million). In order to offer a complete line of electrical and

carburetor parts under the Motorcraft brand name, however, a high percentage of parts must be purchased initially. For example, 90% of the carburetor parts will be purchased because the Ford designed carburetor, produced at Rawsonville, has been original equipment only since 1957, and it cannot be used to service earlier model engines. As the program develops and sales penetration has been established, plans can be made to increase the percentage of parts manufactured by the Division. Even with such improvement, which will be gradual, the ultimate profits from the Motorcraft Program will not contribute materially to the Division's overall position.

III. Product Line Analysis

The profitability of the Division's product lines varies widely. Yet, each of these product lines has been priced on the basis of competion and is being produced under the same management in comparable facilities. The Hardware and Accessories Division has made a careful study of these relationships in an attempt to discover the reasons for the apparent inconsistencies.

We have concluded that the product lines can be separated into two distinct groups, as follows:

Group A includes items that properly can be called complete "Product Lines." Generally speaking, competitors who supply items in this group do a complete management job, including:

1. Product engineering, including design, research and development.
2. Manufacturing.

Exhibit G-12.

3. Marketing and distribution.

This group of products includes generators, starters, distributors, heaters, and instrument clusters.

Group B includes items that might properly be called "Parts". Suppliers of these items furnish only the basic manufacturing; advanced development work and design engineering is furnished to the supplier by the customer, and marketing is generally limited to direct sales of original equipment and current model service parts.

This group of products includes lamps, bumper arms, die castings, and window regulators.

There is a substantial difference in the average profitability of Group A and Group D items as summarized below and detailed on Exhibits I and II.

	1962 Plan		
	Sales	Profits Before Taxes	Return on Assets After Taxes
Group A	$154.6	$18.3	13%
Group B	28.3	(3.0)	(7)%
Total Division	$182.9	$15.3	9%

If the Hardware and Accessories Division's investment was limited to Group A products, profits would be approximately equal to our objective. Our conclusions on the basis of this analysis are summarized on the following page.

Group B Parts

A review of the competitors making Group B parts indicates that generally only manufacturing know-how and

minimum capital are required. These competitors operate with relatively low overhead inasmuch as they are not selling a complete service. They are not required to invest in engineering and research and are not required to have a large marketing and distribution organization such as would be needed to cover adequately the automotive after-market and the trade in general. As a result, the profits on after-market sales of these items typically are realized by the automobile manufacturers rather than by the Group B suppliers. Finally, the labor rates of the Group B suppliers, some because of geographical location, are generally lower than those of the Ford Motor Company.

The parts they produce have a relatively low per unit selling price ranging from pennies for powdered metal parts to approximately $3.00 for lamp assemblies. These competitors are in effect selling a manufacturing service and because of the low per unit cost and the uncertainty of retaining the Ford business from year to year, due to design changes or competitive pricing, they do not invest large amounts of capital. Unless capital expenditure and its proper utilization more than offset our higher labor rates and overhead costs, we cannot make an adequate return and still be competitive on this group of parts. A large number of the products integrated since 1955 were in the Group B classification.

We have concluded that:

1. Further integration of this type of product where investment would be required would not be profitable. Recent integration studies support this position.

2. Existing capacity for these products should be fully utilized as long as they are economically profitable.

3. The efforts of this Division should be directed toward realizing the profit potentials which exist in the Group A items.

Exhibit G-12

Group A Products

In general, our outside competitors for Group A products are substantial companies who offer a complete service, including product engineering, research and development as well as marketing and distribution. They are organized to compete in the entire market, including replacement sales as well as sales of original equipment. The per unit selling price for the products in this group range up to $20. The proper utilization of capital, combined with engineering, manufacturing and marketing know-how, generally results in a satisfactory return on assets. As shown in a following section of this report, the returns of the Group A suppliers reflect, to an important degree, the higher profit margins available in the after-market.

The full profit potential for Group A products, however, is not being realized by the Hardware and Accessories Division.

Under the present Company organization and policies, the Hardware and Accessories Division is not equipped to be fully competitive in the Group A product lines. We do not have control of the product from advanced engineering through marketing. Also, because of relationships with the vehicle divisions and their dealers, present policy does not permit sale of certain of our products in the after-market. Several examples of the overall problem are outlined below.

1. Product engineering responsibility for carburetors is assigned to the Engine and Foundry Division. In our opinion, for the carburetor operation to be profitable to the Hardware and Accessories Division, we must control the engineering so that products are designed to cover not only current model Ford vehicles, but

also the trade and replacement market in general. Our principal competitor has recently completed a standardization program with respect to replacement carburetors, in which 19 models replace 42 models for application on various car lines. Further, Hardware and Accessories Division's carburetor volumes have been dropping with the increase in usage of one barrel carburetors for which a Ford design is not available.

2. Recently a Canadian air cleaner supplier introduced its own designed air cleaner to the Ford Division which will replace approximately 200,000 Truck air cleaners that are now being produced at Sandusky. In addition, we have been advised by Ford Division Purchasing that Fram Corporation has offered a newly designed air cleaner for the 8-cylinder engine which sells for approximately 30% less than the present unit now supplied 100% by Sandusky.

3. The lack of after-market sales is a significant factor for the loss on the shock absorber product line. We are now reviewing the possibility of redesigning our shock absorbers to provide a universal product that can be sold either through Motorcraft or by other distribution method.

4. As a competitor producer, the Hardware and Accessories Division designed and engineered a positive engagement starter. This starter has now been adapted and tooled for use in the Falcon and Comet; it is being sold at competitive price based on a quotation from Delco Remy. The Division recently proproposed to sell this starter in the after-market through the Motorcraft distributors; this proposal has been rejected by the Ford Division because of its

effect on Ford dealers. Delco sells starters in the replacement market and normally, had its quotation been accepted, would have distributed the Falcon starter in this market. As a captive supplier, we are not permitted to sell in the same market; thus the Hardware and Accessories Division is expected to meet a competitive price under non-competitive marketing conditions.

We believe that significant profit improvements could be made on these and similar product lines if the Division had full responsibility for product engineering, manufacturing, and marketing.

IV. A Comparison of the Hardware and Accessories Division With Counterpart General Motors Divisions

As part of our review of the Division's operations and profit potential, we have examined the organization and operating responsibilities of the General Motors Divisions that produce our basic product lines. These are:

Ignition parts, including starters and generators	Delco Anderson, Indiana
Shock absorbers	Delco Dayton, Ohio
Small motors	Delco Rochester, New York
Carburetors	Rochester Products Rochester, New York
Air Cleaners	A. C. Spark Plug Flint, Michigan
Instrument clusters	A. C. Spark Plug Flint, Michigan
Body Hardware	Ternstedt Manufacturing Detroit, Flint, Columbus, Ohio Trenton, New Jersey
Lamps	Guidelamp Anderson, Indiana

Exhibit G-13

1. The GM Divisions have complete responsibility for engineering, manufacturing, marketing and distribution for each of their product lines. Except for Rochester Products, each was acquired as a going company and has continued to supply not only GM but also the trade in general.

2. GM therefore has a broad spread of product lines, including two major high replacement items, batteries and spark plugs.

3. The revenue of these divisions is not dependent solely on General Motors vehicle sales, as each has:

   a. Other customers, including Ford, in the automotive field

   b. Customers in other industries, such as marine

   c. Substantial revenue from after-market sales

As a result of this organization and operating structure, not only are these GM Divisions profitable, but AC and Delco, in particular, have become leaders in their respective fields.

Under the GM system, unlike that of Ford, the high-volume competitive service parts are all marketed under the manufacturing division brand names. Responsibility for product design, advertising, promotion and pricing are assigned to each division.

The parts distribution structure used by the General Motors manufacturing divisions operates through three separate channels of distribution. First, the sale by the car and truck division P & A operations to franchised dealers who, in turn, sell at retail to their customers and at wholesale to garages and service stations. Secondly, sale by General Motors manufacturing divisions to the United Motors distributors and AC warehouse distributors.

Both of these groups of distributors are franchised by General Motors. They sell, in turn, to independent jobbers, garages, and gasoline stations. The third channel of distribution for General Motors' parts is direct sales to major chains, such as the oil and tire companies and the major mail order houses.

This approach has made GM one of the leading factors in all areas of the replacement market, and with these diversified selling channels, the level of General Motors' parts sales is not dependent entirely on the effectiveness of GM dealers.

V. The Importance of General Trade and After-Market Business to the Future Profits of the Hardware and Accessories Division

Sales in the after-market traditionally have provided a major portion of the profits of companies that manufacture the Group A-type components produced by the Hardware and Accessories Division.

Many of these companies quote prices for production parts at or near a break-even position, in order to obtain tooling from the automotive producers and to qualify as original equipment suppliers. This permits them to engage in profitable after-market operations with a relatively small additional investment. The following table compares representative prices for parts sold by the Group A suppliers as original equipment, and for the same parts sold by them to distributors.

	Production Part Price	After-Market Price (to Distributors)
Batteries	$7.95	$17.26
Spark Plugs	.06	.39
Oil Filter Element Assembly	.57	1.26
Voltage Regulators	1.73	3.02
Shock Absorbers	1.05	2.52
Distributor Point Sets	.23	.60

Exhibit G-12

Although increased design, packaging, and distribution costs are incurred in selling to the after-market, the higher prices charged for these sales make the business extremely attractive to a manufacturer. Based on the existing price structure for production and after-market parts, it appears that many parts cannot be produced and sold only for production use because of the low profits.

Shock absorbers can be cited as a specific example of this problem. Several years ago, Monroe Auto Equipment dropped out of the price competition for Ford's production shock absorber business. During this period, the company has concentrated on building up a strong position in the after-market. Now, Monroe has come in with a lower quote on production shock absorbers. As incremental business added to the basic after-market volume, this price can be sustained; without the after-market sales, the production price would not be profitable. (Examples are shown in Exhibit III.)

The outstanding example of the profitability of after-market sales is Champion Spark Plug, which sells over 90% of its products in the replacement market. For the past three years Champion has earned an after-tax return on actual assets of 20% (35% after eliminating excess cash). A comparison of the profitability of Champion and other companies producing Group A products with companies producing parts in the Group B category is shown in Exhibit IV.

Because the Company's past policies prevented direct sales in the after-market by manufacturing locations, the Hardware and Accessories Division has not been fully competitive with other companies producing similar products. It is increasingly apparent, however, that the Division cannot realize its full profit potential, and the Company cannot realize a justifiable return on its investment in the Divi-

sion's facilities, without volume sales in the after-market and to the trade in general.

Requirements for Effective After-Market Participation

The basic requirements for successful participation in after-market business are an established distribution system with a recognized brand name, a full line of high volume service parts, engineering experience in replacement designs, low volume production facilities and experience, and the opportunity to capitalize on an established car population.

To the extent that after-market parts are sold through service stations and local garages, the possession of a brand name that can be recognized by the average driver is a valuable asset. Because of dealer agreements, this cannot be a name used on the Company's cars.

The second requirement for successful selling in the after-market is the ability to market a full line of high volume service parts. The major jobbers and distributors are unwilling to stock and to push one or two items under a given brand name. Once a product line of high volume service parts is established, however, it is possible to include additional items that could not support the costs of a separate distribution system.

The third requirement is engineering experience, particularly in the areas of low volume design and inexpensive adaptation of production parts. Successful marketing in the after-market normally requires that parts sold be adaptable for use on several models of a given car line and in some cases on several different car lines. Our engineering activities have had little experience in engineering these types of modifications. This is a completely different approach than that applicable in engineering production parts

where volume may justify changes to gain relatively minor per unit cost or design advantages.

A fourth requirement is the possession of low volume production facilities and low volume "know-how". The heavy degree of automation in Ford plants and the associated lack of flexibility make it almost impossible to compete successfully with independent producers who are able to manufacture a number of small volume items with minimum amounts of capital investment.

Finally, for many components, the most important requirement is the existence of an established car population requiring service parts that can be manufactured using the original production tools and facilities. This population constitutes a natural market for the "original equipment" supplier.

Alternative Approaches for Obtaining After-Market Sales

Before the establishment of the Motorcraft and Car Lite programs, the Ford Motor Company sold parts only through Company dealers. These dealers are generally effective in selling captive parts but reports submitted to the Marketing Committee indicate that the dealers are less effective in selling parts associated with small repairs and normal maintenance and tune-up requirements. It is in these parts particularly that Ford has been losing its share of the after-market business and the competitors of the Hardware and Accessories Division have been making inroads. The trend of sales for parts of this type has been away from franchised automobile dealers to independent garages and service stations.

With the Motorcraft program, Ford undertook the development of a new brand name and distribution system, separate from the Ford name and dealer network. This pro-

gram will suffer, however, from the lack of an established name and a sufficiently broad product line to attract jobbers and distributors. Profits on this program are also limited because many of the parts sold under the Motorcraft brand are not manufactured by the Ford Motor Company, with the result that the Company is able to add only a merchandising markup (if any) on top of the manufacturer's selling price. It is apparent that for this program to produce any substantial volume of added sales, it will require a long period of time and major investments in advertising to promote the brand name. Although specific investments could be made in low-volume service facilities to produce parts for the existing past model car population, the starting costs undoubtedly would be so large that this would not be profitable.

We believe the most attractive alternative is to acquire an existing brand name, distribution system, and experienced production and engineering organization, through the acquisition of one or more companies with established sales to the after-market and to the trade in general. This alternative is particularly attractive because it offers an opportunity to add to the profitability of the companies (1) by selling Ford-produced parts through the existing channels of distribution and under the recognized brand names, and (2) by sourcing to these companies components now purchased to meet Ford's current production and service requirements.

VI. Review of O'Leary Corporation [During discussions prior to the acquisition The Electric Autolite Company was sometimes referred to as O'Leary Corporation or Mars Corporation.]

A review of automobile equipment manufacturers, recently completed by the Finance Staff, indicates that the

Exhibit G-12

O'Leary Corporation may be the most promising of these companies as a candidate for acquisition by Ford. The Finance Staff's preliminary conclusions were presented to the Integration Committee at its February 25 meeting. At that time, the Committee requested Mr. Duffy to review the available information on O'Leary and to determine whether the company appears sufficiently promising to warrant further investigation.

Accordingly, the Hardware and Accessories Division has reviewed the available information on the company. This review indicates that O'Leary probably would provide a number of the elements the Division must obtain if it is to realize the benefits of participating in the trade and after-market business. These are:

1. An established distribution organization.
2. A line of products with high replacement volume.
3. A well-known brand name and general trade acceptance.
4. Facilities and management for both high and low volume production.
5. A substantial established market for its products.

In addition, the O'Leary stock is reasonably priced and the company appears to have an attractive profit potential. It might also provide a nucleus for further acquisitions of companies manufacturing automotive components now purchased by Ford that are sold to the trade and in the replacement market.

The sections of the report that follow summarize briefly our evaluation of all data available, short of direct inquiry with the O'Leary management.

Exhibit G-12

Distribution Organization

At present, O'Leary Corporation has a total of about 400 employees in the sales organization. Of this total, about 300 are involved in replacement sales and 100 in original equipment sales. The sales organization consists of nine regional sales offices, each of which handles both original equipment and replacement market sales.

Original equipment is sold to Ford, Chrysler, American Motors, and Studebaker-Packard, and to independent manufacturers of trucks, small gasoline engines, and aircraft. Replacement parts are sold to some 66 distributors who sell in turn to jobbers, oil companies, tire companies, and in some cases, to large retailers. We think the company has the kind of organization we would need to be effective in the replacement parts market.

The Canadian subsidiary supplies electrical components to Ford of Canada, to other Canadian automotive producers, and to the replacement market. In addition, the company is expanding its sales in overseas locations through licensing agreements with foreign manufacturers and through exports. At the present time, O'Leary batteries are being manufactured in eight overseas countries and ignition parts in Brazil and Argentina.

Principal Products

O'Leary sells over 400 items to the trade and to the replacement parts field, including:

1. *Batteries and Spark Plugs*

   Although the company is not the sales leader for either of these products, its lines are well-known and widely distributed. Batteries and spark plugs are the two highest volume items handled by independent parts distributors.

Exhibit G-12

2. *Other Electrical Parts*

O'Leary manufactures and sells the following electrical items:

- Generators and Parts
- Starters and Parts
- Voltage Regulators
- Ignition Coils
- Switches and Relays
- Condensers
- Distributor Point Sets
- Windshield Wiper Motors and Other Small Motors
- Lamps
- Speedometers
- Other Instruments
- Wire and Cable Products (Includes speedometer cables)
- Horns

3. *Other Parts*

O'Leary manufacturers bumper impact bars and other stampings, zinc and aluminum die castings, ceramic products, pressure and temperature gauges, and other production and service parts.

Although O'Leary's product line duplicates to some extent the components now manufactured by the Division, our preliminary analysis indicates that except for Chrysler current model starters, generators, distributors, ignition coils, and voltage regulators, which will be integrated by Chrysler starting with the 1961 model, the items sold by O'Leary should complement the Division's product line by providing a wide range of types, models, etc., for use on products other than Ford Motor Company cars, trucks, and tractors.

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O'Leary's breakdown of sales for 1959 was as follows:

	Amount (Millions)	Percent
New Automotive Equipment:		
Chrysler Corporation	$ 67	33.2%
Other	48	23.8
Automotive Replacement Parts:		
Chrysler Corporation	7	3.5
Other	55	27.2
Aviation, Marine, Farm Equipment, Export and Other	25	12.3
Total	$202	100.0%

In 1959, sales of original equipment to the Chrysler Corporation were about $67 million or 33% of total sales. Replacement parts sold to Chrysler were an additional $7 million or 4% of sales. The major electrical items planned for integration by Chrysler account for about $22 million of 1959 sales. We have no knowledge of any further integration by Chrysler or other companies that would affect O'Leary's future sales.

Brand Name

The O'Leary name is well known and has been identified with a wide range of different products sold in the service market. For a number of years prior to the death of Mr. Royce G. Martin, there was very little promotion of the company's brand name. Under the new management, however, the O'Leary brand name, and particularly O'Leary spark plugs and O'Leary Sta-ful batteries, have been promoted heavily. In 1959, the company was a sponsor of the NBC "News on The Hour" and the weekend "Monitor" pro-

grams. Early in 1960, the company entered its products in the NASCAR races at Daytona Beach. This spring, O'Leary will re-enter television via the Dave Garroway show, which will completely cover the presidential election.

The O'Leary brand name probably could be applied to a variety of products now manufactured by Ford plants, including:

Electrical Items	Shock Absorbers
Carburetors and Parts	Universal Joints
Master Brake Cylinders	Water Pumps
Oil Pumps	

Facilities

O'Leary operates a total of 23 domestic plants, employing approximately 12,000 people. The plants are organized in nine divisions as follows:

Division	Number of Plants
Electrical Products Division	7
Battery Division	6
Spark Plug Division	1
Ceramics Division (shares plant with Spark Plug Div.)	—
Die Casting Division	2
Industrial Batteries Division (C&D Batteries Co. recently acquired)	3
Industrial Instruments Division (shares plant with Wire Division)	—
Wire Division	2
Bumper Division	2

In addition to the domestic plants, O'Leary operates 3 plants through its wholly-owned Canadian subsidiary. A

battery plant is operated in Brazil by a partially-owned subsidiary.

Management end engineering personnel have experience with, and the O'Leary plants have successfully produced, both high volume production parts and low volume service items for many years.

O'Leary owns approximately 1.3 million square feet of space in Toledo. These facilities house the general office, the central research and development activity and all of the Electrical Products Division except for the plant in Syracuse, New York, and the Canadian subsidiary. The company has already announced that it plans to curtail substantially the work force at Toledo upon termination of the Chrysler business. Except for about 500,000 square feet of new plant and the research facility, most of the Toledo facilities are multi-story buildings of little value.

The battery plants are small (100,000-200,000 square feet) and dispersed geographically to minimize distribution costs. This is traditional for the industry.

The spark plug plant is reported to be new and equipped with the most modern facilities.

The bumper plants are typical job shop stamping and plating facilities.

We have not investigated the size or condition of the remaining plants.

Engineering and Research

The Engineering and Research function of the company has been decentralized to a substantial degree to the Divisions. The central research organization includes about 200 employees, for a total of about 400 employees in this area.

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Management

For the 20 years preceding 1954, the company is reported to have been essentially a one-man operation, under Mr. Royce G. Martin. Since Mr. Martin's death in 1954, the company has undergone a series of organizational changes. In 1955, Mr. G. W. Wattles, a New York financier, began acquiring O'Leary stock through Mergenthaler Linotype Company. In 1956, Mr. C. R. Feldman, an associate of Wattles, moved to the board, and in 1957, Mr. Wattles became Chairman of the Board and is now Chairman of the Executive Committee.

During this period, the Company set up its present decentralized organization, bringing men in from the outside. Mr. Lawrence Garber, Vice President and General Manager of the Battery Group, was formerly Vice President—Manufacturing for H. K. Porter; Mr. J. J. Bohmrich, Electrical Products Group, was Vice President and Assistant to the President of Fruehauf; Mr. Robert Twills, Ceramics Group, was formerly manager of the company's spark plug plant; Mr. Robert Volk, General Products Group, was a works manager at National Supply Company. Research is headed by Mr. G. E. Spaulding, formerly the company's chief ignition engineer. The latest changes were announced last year. Mr. E. H. Stroh, formerly Vice President and Automotive Sales Manager for Holley Carburetor, was appointed Vice President and Director of Sales. Mr. R. H. Davies, formerly Vice President and General Manager of the Industrial Truck Division of Clark Equipment, was named President.

Ownership

The O'Leary Corporation has an estimated 14,000 stockholders. It is controlled, however, by Mr. Wattles through

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his control of Mergenthaler Linotype, owner of about 29% of O'Leary common stock. We do not know whether Mr. Wattles would be interested in selling O'Leary, but it could be easier to deal with one man than with the management of a widely-held corporation.

A few days ago a Mr. L. H. Middleton, formerly Vice President of Engineering and Research for O'Leary, contacted the Company to inform us that the O'Leary Corporation was interested in a potential sale or merger with Ford. We have not pursued this matter further with Mr. Middleton and do not propose to do so until proper authorization has been given by Mr. Ford.

Financial Data

O'Leary stock is now selling at about $50 a share—ten times 1959 earnings and .7 times book value. Current assets, net of all liabilities, are $42 a share. In comparison, Champion Spark Plug is selling at 14 times 1959 earnings and 3.6 times book value. The Dow Jones stocks are selling at 18 times earnings and 1.9 times book value. The price of the O'Leary stock probably has been held down by the pending loss of Chrysler business. Furthermore, the market does not appear to have recognized the substantial change in management during the past two years.

Although we do not have enough information to compute accurately a pro forma return on the Company's investment in O'Leary, we have, based on available data, estimated the following:

Ford investment required to acquire O'Leary	$50	-$70	millions
Estimated profits after merger (after taxes)	9	- 12	millions
Estimated return on Ford investment (after taxes)	13%	- 19%	

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These estimates are based on the following:

1. The Ford investment shown assumes that O'Leary could be purchased for a premium of 10%-40% over its current market value—equivalent to prices of $55 to $70 a share and after adjustment for excess cash.
2. The profit estimate assumes that additional business of about $55 million would be sourced to O'Leary for components now purchased, including batteries, spark plugs, wiring harness, and other parts.
3. The high and low profit estimates give effect to the loss of the Chrysler business in major electrical parts. The low estimate assumes loss of all Chrysler current model business.
4. The profit estimates do not include:
   a. Increased sales of present O'Leary parts as a result of association with the Ford name.
   b. Savings through more advantageous utilization of O'Leary and Ford facilities.

Recommendation

The studies completed to date indicate that O'Leary appears to be sufficiently attractive to warrant further investigation. There are many questions that must be resolved, however, before a firm recommendation could be made. Among the more important questions are:

1. How good is O'Leary's distribution organization?
2. How much of O'Leary's present sales to other automotive companies could be retained under Ford ownership?

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3. What products could the Company supply to Ford and what are the profits on these products?

4. What is the sales volume and profit on each major item sold in the replacement market?

5. How would O'Leary's replacement sales affect the Company's P & A operations and pricing policy?

6. What Ford products could be sold through O'Leary's service distribution organization?

7. How good are O'Leary's facilities? To what extent would they complement Ford's present plants?

8. Would the acquisition result in serious industrial relations problems?

9. What specific anti-trust problems would arise and what is the magnitude of each?

To answer these questions, direct contacts will need to be made with Mr. Wattles or with other members of O'Leary's management. It is requested, therefore, that the Integration Committee recommend to Mr. Ford that Mr. Duffy, Mr. Beck, and a representative of the Legal Staff be authorized to contact Mr. Wattles to determine the potential interest of O'Leary in a sale or merger with Ford. If the initial inquiry appears promising, then a detailed investigation would be undertaken.

EXHIBIT G-14

FORD MOTOR COMPANY

Executive Communication

April 12, 1961

To: Members of the Board of Directors

SUBJECT: Acquisition of Certain Assets of The Electric Auto-Lite Company

Summary of Proposal

It is proposed that Ford Motor Company acquire the following assets of The Electric Auto-Lite Company at a total purchase price of approximately $28.0 million:

1. The spark plug operations located at Fostoria, Ohio;
2. The battery operations located at Owosso, Michigan;
3. The trade-mark and trade name "Autolite" in all countries except Canada, Brazil, and Venezuela; and
4. All patent and license agreements covering spark plugs and batteries except in Canada, Brazil, and Venezuela in which Ford would obtain nonexclusive licenses.

Assets include fixed assets, special tooling, inventories, and prepaid expenses, as set forth in Exhibit I. The final purchase price would be based on an audit of inventories and prepaid expenses.

As a part of the proposed transaction, Autolite would assign to Ford its franchises with several thousand distributors, jobbers, and dealers and would make available to Ford its distribution organization and branches presently handling Autolite sales to those outlets, both domestic and

foreign. Autolite would continue to make and sell spark plugs, batteries, and electrical products for sale to automotive manufacturers and others, for both original equipment and replacement.

In addition, Ford would agree to purchase, for a limited period, certain service parts from Autolite at competitive prices. The purchase contract also would provide for sale of certain spark plug components to Autolite and purchase of certain battery components from Autolite. The principal terms of the transaction are listed in Exhibit I, attached.

The marketing, financial, organizational and other major considerations related to the proposal are described in the following sections of this communication.

A. The Automotive Replacement Parts Market

The automotive replacement parts market has grown during the past decade and, at present, total U. S. replacement parts sales are estimated at $3.5 billion annually.

Ford Motor Company's sales penetration in this market, derived almost exclusively through our franchised dealers, has declined steadily over the past several years.

The Company's products account for about 25% of the total U. S. car population; the Company's share of the total replacement parts business is estimated at 10%. The primary reason for the decline is the shift of repair and replacement business away from franchised dealers to service stations, independent garages, and other outlets. Over the past ten years, the share of repair work performed by franchised dealers has declined almost 50%. During this period, the total number of franchised dealers has remained virtually unchanged, while independent garages have increased by 75% and service stations with repair stalls by 25%. It appears that the franchised dealers' share of

the market will continue to decline because of the lower cost and more convenient service offered by service stations and independent garages.

General Motors has strong, well-established organizations servicing outlets other than franchised dealers—United Motor Service, A-C Spark Plug, and Delco. General Motors' 1960 sales in this area are estimated at $285 million, compared with Ford's sales of about $5 million. For example, A-C has 25% of the spark plug replacement market and Delco 20% of the battery replacement market.

Substantial sales in the replacement market of certain original equipment items are required if the Company is to continue manufacture of these components on a profitable basis. There is a significant differential between the profit margins on original equipment and on replacement parts. Ford now has substantial excess manufacturing capacity in several of its parts plants because we cannot meet competitors, prices with volume limited to sales of parts for original equipment and Company dealer requirements. We must participate fully in the replacement market if we are to secure volume adequate to use these facilities effectively.

Availability of Ford parts, at competitive price levels and in the distribution channels that Ford car owners are choosing to patronize—service stations, independent garages, chain stores, etc.,—may, over the long term, have an important effect on car owner attitude toward the manufacturer and, therefore, on new car sales.

B. Motorcraft Program

Extensive studies were made over the past two years to determine how the Company could compete more effectively in the aftermarket. Based on these studies, we concluded

that successful participation in the replacement market requires:

1. A full line of high volume service items that fits all Company vehicles and most competitive makes;
2. An established, nationwide distribution organization oriented toward this market; and
3. A nationally recognized brand name.

On April 16, 1959, the Executive Committee approved the development of a program to increase the Company's sales in the service parts market through channels other than franchised vehicle dealers. This program is assigned to Motorcraft Marketing Operations, a part of the General Products Group.

To date, agreements have been made with 51 warehouse distributors, all members of the Automotive Electric Association, who in turn have entered into agreements with approximately 1,700 jobbers, for the distribution of Motorcraft parts. The present line of Motorcraft parts consists of major ignition and carburetion parts for Ford vehicles. Motorcraft sales in 1960 were $2.4 million.

Experience to date has indicated that in order that the Motorcraft Program be fully competitive, it is essential that spark plugs and batteries be included in the line of parts merchandised. These products represent high volume service items required a full line of parts for multiple car applications.

C. Background of Autolite Proposal

For many years prior to 1960, Autolite supplied a major part of Chrysler electrical product requirements. By 1960, Chrysler had completed a program to manufacture its re-

quirements for high volume electrical items such as starters, generators, and voltage regulators. Autolite, recognizing that its position in replacement parts was deteriorating with the loss of the Chrysler original equipment business, is attempting to reorient its operations into the private brand automotive component business and non-automotve areas.

In the spring of 1960, the Company considered a proposal under which Ford would have acquired substantially all the assets of Autolite. Although it was believed that the transaction would be profitable to Ford, management decided last July not to recommend the proposal to the Board. This decision was based primarily on the desire to avoid action that might raise serious questions under the antitrust laws.

Early this year, Autolite approached the Company with a proposal that Ford acquire only its spark plug and battery manufacturing and distributing operations. After preliminary discussions with Autolite, this proposal was rejected and the more limited acquisition described herein was negotiated.

D. Marketing Considerations

Acquisition of spark plug and battery manufacturing operations, an extensive distribution organization in the aftermarket and a recognized brand name will substantially accelerate the Company's program to increase its penetration in the replacement market.

The present Motorcraft distribution organization would be strengthened immediately as indicated in the following table:

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	Motorcraft	Acquired from Autolite
Personnel in Distribution Organization	26	355
Regional Field Offices	0	6
AEA Distributors	51	57
Other Distributors	0	950
Jobbers	1,700	14,000

In addition, the 300 foreign distributors and jobbers and 11 licensees in Europe and Latin America should serve as the nucleus for establishment of a major aftermarket business in these areas.

E. Financial Considerations

The projected profitability of this proposal over the next ten years is detailed on Exhibit II and summarized below.

	Ten-Year Annual Average
	(Dollars in Millions)
Sales	$65.7
Accounted Profit Before Taxes (a)	9.3
Assets Employed	35.7
After-Tax Return on Assets Employed	12%

(a) The full accounted profits reflect an allocated share of Divisonal and Central Office expenses.

F. Proposed Operating Plan

It is planned that the spark plug and battery plants would be assigned to the Hardware and Accessories Division. This Division now manufactures electrical, ignition,

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and other parts that cover most of the high volume replacement market items.

Most of the employees of the plants and the distribution organization, both salaried and hourly, will be taken over by Ford under appropriate arrangements between the parties and with the union.

The Autolite and Motorcraft distribution organizations would be integrated and the new operation assigned responsibility for merchandising products made by the General Products Group to outlets other than the Company's vehicle divisions and franchised Company dealers. The operation also may purchase and distribute parts from other Company divisions or outside sources as required to round out its replacement line.

With respect to merchandising, the following general plan has been formulated:

1. Autolite trade name would be used initially on spark plugs, batteries, and other parts sold in the replacement market other than Ford dealers.

2. The Motorcraft name would be continued on certain electrical and ignition parts. Advertising would link the Autolite and Motorcraft trade names with the principal theme of an all-car-line concept.

3. Initially, spark plugs and batteries installed as original equipment or sold through our franchised dealers would carry the FoMoCo brand or some other private brand name.

Market studies made to date indicate that substantial benefits could be gained in the aftermarket if the "Autolite" name were used on original equipment in Ford cars. It is planned that further studies be made to develop a Com-

pany-wide merchandising program covering the use of "Autolite" or other trade names.

F. Recommendation

It is recommended that the Board of Directors approve acquisition of those assets of The Electric Auto-Lite Company described above and detailed in Exhibit I, attached, for a total price of approximately $28.0 million.

In addition, it is requested that the Vice President, General Product Group, be authorized to execute for the Company an Agreement, in the form attached, dated April 12, 1961, between The Electric Auto-Lite Company and Ford Motor Company relating to the acquisition of such assets and that the Vice President, Purchasing, be authorized to execute a purchase agreement, in the form attached, also dated April 12, 1961, covering purchases by Ford from Autolite of certain electrical parts, batteries, and spark plugs, both in form satisfactory to the Office of General Counsel and the Office of Tax Affairs.

/s/ I. A. DUFFY
I. A. Duffy

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EXHIBIT I

SALIENT POINTS OF AGREEMENT

An agreement has been reached with the management of Autolite whereby that Company would sell to Ford for approximately $28 million a spark plug manufacturing plant, a battery manufacturing plant, its replacement market distribution organization, and the name "Autolite".

A. Under this agreement, Ford would acquire:

1. The Autolite spark plug operation located at Fostoria, Ohio, and the battery operation located at Owosso, Michigan, including land, buildings, specially designed machinery and equipment, other fixed assets, inventories, prepaid expenses and intangibles, being purchased at the following prices:

	Purchase Price (In Thousands)
Land	$ 80
Land Improvements, Including Railroad Sidings, Fences and Interior Streets	200
Buildings and Building Equipment	3,000
Machinery and Equipment, Including Tools, Dies, Molds, Furniture and Fixtures and Automotive Equipment	18,103
Inventory	3,896(a)
Prepaid Expenses (Including Insurance)	488(a)
License Agreements, Trade-Marks and Patents	250
Goodwill	2,000
Total	$28,017

(a) Subject to adjustment by audit.

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2. The Autolite aftermarket distribution organizations for spark plugs, batteries and electrical parts;

3. The major part of Autolite's spark plug engineering and manufacturing organizations in the U. S.;

4. Exclusive domestic and world rights to the name "Autolite", excluding Canada, Brazil, and Venezuela; and

5. All patent and license agreements covering spark plugs and batteries except in Canada, Brazil, and Venezuela, in which Ford would obtain nonexclusive licenses.

B. Autolite would retain the right to sell spark plugs and batteries under the name "Autolite" in Canada, Brazil, and Venezuela, and under a trade name other than "Autolite" to any present or potential customer in the U. S.

1. Autolite plans to provide its present original equipment and private brand customers with spark plugs from its Sarnia, Ontario plant and from one of its U. S. plants (probably Bay City, Michigan).

2. Ford would agree to purchase from Autolite 12 million service plugs over a period of two years at competitive prices.

3. Autolite would retain its remaining U. S. Battery plants to supply its present original equipment and private brand customers. In addition, Ford would execute a three-year purchase agreement covering purchase of 45% of our total battery requirements at competitive private brand prices from Autolite.

4. Ford would supply Autolite with ceramic insulators for spark plugs and Autolite would supply battery separators and cases to Ford at competitive prices.

Exhibit G-14

5. Ford would supply engineering assistance to Autolite on spark plugs and Autolite would supply such assistance to Ford on batteries, both on a fee basis.

C. Ford would execute a three-year purchase agreement covering purchase from Autolite of certain specified service parts for which Autolite has been the original equipment manufacturer. Ford would purchase these parts for resale in the domestic and foreign replacement markets.

D. As a result of the proposed agreement, Ford may incur the following other obligations:

1. Unfunded past service liability under Ford pension plans of approximately $2-$3 million, if service with Autolite should be recognized under Ford's plans. (Autolite's past service funding has been at approximately the same rate as Ford's.)

2. Possible supplemental unemployment benefit costs of $200-$300 thousand, depending upon layoff experience and if Autolite service were to be recognized under the Ford SUB plan.

3. The costs of Autolite's warranty-exchange program on batteries in excess of $200 thousand. Based on Autolite's experience in 1959 and 1960, these costs should not exceed $700 thousand.

4. Autolite advertising commitments. Costs of planned advertising for 1961 are $2.8 million. Autolite will pay $616 thousand, the share attributable to the January 1 to April 12 period.

The estimated costs of these obligations, all of which are normal operating costs, are provided for in the profit projections contained in Exhibit II.

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EXHIBIT II

PROPOSED ACQUISITION
SUMMARY OF SALES, PROFIT AND RETURN
(Dollars in Millions)

	Sales	Accounted Profit(a) Before Taxes	Accounted Profit(a) After Taxes	After-Tax Return On Assets
1961 (From April 12)	$35.8	$ 1.1	$(0.5)	(0.8)%
1962	54.0	4.6	2.2	5.9
1963	58.0	5.7	2.8	7.5
1964	60.3	7.7	3.7	10.2
1965	62.3	8.6	4.1	11.6
1966	65.7	9.7	4.7	13.4
1967	69.0	10.9	5.2	14.9
1968	72.4	12.1	5.8	16.8
1969	75.6	13.2	6.3	18.4
1970	78.9	14.3	6.9	20.3
1971	82.3	15.4	7.4	22.1
Average First 10 Years	$65.7	$ 9.3	$ 4.3	12.2 %

(a) Includes amortization of fixed assets based on costs detailed in the Agreement. Goodwill of $2 million is written off in 1961 without tax credit.

EXHIBIT G-19

April 20, 1961

FORD MOTOR COMPANY
Executive Communication

To: Members of the Marketing Committee

Subject: Spark Plug and Battery Brand Policy

The purpose of this memorandum is to recommend that the Autolite brand be used on spark plugs installed as original equipment on Ford Motor Company's domestic cars and trucks and that the Autolite brand also be used by Ford and Lincoln-Mercury Divisions on replacement spark plugs sold to franchised dealers. The Motorcraft Division would sell spark plugs with the same brand to independent distributors and jobbers. At the present time, the Champion brand appears on both original equipment and replacement spark plugs sold by franchised Ford and Lincoln-Mercury dealers. Spark plugs carrying the Champion brand are sold by Champion to independent distributors and jobbers. While it is recommended that only the Autolite brand be used on the spark plug itself, it is anticipated that the vehicle division practice of packaging the branded spark plug in a FoMoCo box would be continued on replacement sales to franchised dealers.

It is further recommended that the Autolite brand be used on original equipment batteries and on batteries sold to franchised dealers for the replacement market. In the case of batteries, however, the recommendation anticipates that the Autolite brand, while prominent, would be used in conjunction with the FoMoCo brand and/or the "Thunder Power" or other names on both original equipment and replacement units sold through the franchised dealer organization. Batteries sold by the Motorcraft Division to inde-

pendent distributors and jobbers would carry only the Autolite brand.

At the present time, General Motors car lines use A. C. spark plugs and Delco batteries on original equipment and for replacement sales through franchised dealers. Spark plugs and batteries that are branded in the same manner as the original equipment units are distributed by United Motor Service through independent channels. Chrysler uses spark plugs and batteries with the Autolite brand on original equipment. Electric Autolite uses the same brands for replacement sales through independent distribution channels. The use of branded spark plugs and batteries is, therefore, a common practice in the industry. Exhibit I summarizes the spark plug brand practices of the major automobile companies. Exhibit II summarizes battery brand practices.

The recommendations that the Autolite brand be used exclusively on spark plugs and in conjunction with a Ford brand on batteries are based on the following considerations:

Effect of Autolite Brand Usage on Ford and Lincoln-Mercury Dealer Morale

Because Ford Motor Company historically limited its activity in the replacement market to sales through franchised dealers, even the Motorcraft program, with less than $5 million in sales in 1960, was met with substantial resistance from the franchised dealer organization. However limited the objective merits of the dealer case against Motorcraft may be, it is a fact that dealer morale and confidence were somewhat shaken by the Motorcraft program and it can be predicted that comparable and probably stronger objections will be raised by the Autolite acquisition.

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While the Ford Motor Company is determined to participate in the replacement markets that are not reached by franchised dealers, it is important that this participation be achieved without a serious disruption of the very sizeable sales and profits now being obtained through Ford and Lincoln-Mercury dealers. The brand recommendations have been developed by balancing the advantages that would accrue to Motorcraft from a widespread use of the Autolite name on original equipment against the likely effects of such action in the Ford and Lincoln-Mercury dealer organizations.

The substitution of spark plugs with Autolite brands for the Champion spark plugs that are now used on original equipment and distributed through Ford and Lincoln-Mercury dealers can be accomplished by continuing to package spark plugs in FoMoCo boxes when the plugs are to be sold through franchised dealers. The direct effect of the change on the dealer organizations will be limited to the loss of the somewhat stronger Champion name. The use of a spark plug with the Autolite brand will not represent a change in Ford's brand policy, for the dealer organizations now face competition from Champion spark plugs that are distributed through independent channels.

While the use of the Autolite brand on spark plugs will have no brand policy implications to the dealer body, the use of the Autolite name on batteries presents more serious problems. For both original equipment and service sales, the car and truck divisions now use batteries with brands that are available only to franchised dealers. It can be predicted that the use of an Autolite battery in original equipment and service sales will be considered by the dealer organizations, as an indication that the Corporation is withdrawing some of the protection that had been provided by private brands.

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Effect of Autolite Brand Usage on Motorcraft Operations

The importance that spark plug manufacturers place on original equipment sales is best indicated by the fact that Champion and Autolite spark plugs used in production are sold for approximately 6¢ apiece. Spark plugs used to meet service requirements are sold for approximately 35¢ apiece. Production costs are estimated at 14¢. The Electric Autolite Company has succeeded in selling branded spark plugs and batteries to a number of major manufacturers of automobiles, trucks and tractors including Chrysler, International Harvester and American Motors.

A substantial portion of the Electric Autolite organization's sales appeal to independent distributors in the replacement market has been based on the fact that the Autolite brand is widely used on original equipment batteries and spark plugs. The Motorcraft Division's management believes that serious damage would be done to the Autolite brand name and major obstacles would be placed in the way of increased sales in the replacement market if the Ford Motor Company were to refuse, after purchasing the brand name, to use it on original equipment.

While the Motorcraft organization's interest would be best served by using only the Autolite brand on spark plugs and batteries, the Division is prepared to agree to using the Autolite brand in conjunction with a Ford brand on batteries if the car and truck divisions believe that franchised dealer reactions to such a program would be significantly less negative than the reactions that would be anticipated if only the Autolite brand were used on the battery.

The Motorcraft Division believes that the advantages of using the Autolite brand on original equipment are concentrated in the spark plug and battery area and has not requested, and does not plan to request, that the Autolite

name be used on other electrical components installed on new vehicles.

Effect of Autolite Brand Usage on Ford Motor Company New Vehicles Sales

The Autolite brand does not now have sufficient strength to indicate that any immediate advantage would accrue to the Company's vehicle sales operations as a result of the brand decision. In the long term, however, the Motorcraft Division believes that the use of the Autolite brand can improve the Company's position in the new car market in two ways. First, Autolite advertising can be developed to lend stature to Ford Motor Company product lines in much the same way that Delco and A. C. advertising has been used to suggest that General Motors products offer superior electrical components. An additional benefit may accrue over time if the association of the Ford and Autolite names leads customers, that are motivated by economy, to believe that adequate service will be available on Ford Motor Company products in the least expensive replacements outlets. As indicated by Exhibit III, Ford Motor Company sales are much more heavily concentrated in the low price ranges of the automobile market than are the sales of either Chrysler or General Motors. It is the customers, who are initially motivated by low purchase prices, that are most likely to consider low maintenance cost to be an important purchasing inducement.

Financial Implications of Brand Usage

The probable financial effects of the spark plug and battery brand decisions differ significantly. At the present time, the car and truck divisions are selling Champion spark plugs to the franchised dealer organization in direct

competition with distributors and jobbers offering the same spark plug. In the car and truck parts and accessory organizations begin to sell Autolite spark plugs, it is unlikely that any dealer now buying directly from the Company would switch to an Autolite jobber. Because the Champion spark plug has been used on the Ford car for so long a time, however, the car and truck divisions will be faced with a substantial task in switching dealer loyalties from Champion to Autolite. It is very important, financially, that the switch be made at an early date. At the present time, the car and truck divisions are selling Champion spark plugs for approximately 48¢ and earning an economic profit of approximately 8¢ per spark plug. The economic profit on an Autolite spark plug, sold to franchised dealers will total approximately 29¢. On a short term financial basis, therefore, the Corporation will be better off selling Autolite spark plugs through service, even if a significant volume loss is experienced.

In the case of batteries, the car and truck divisions earn an economic profit of approximately $5.50 on each unit sold to franchised dealers. Because the Motorcraft Division will sell Autolite batteries through distributors and jobbers, its revenue and economic profit from a battery sale will be lower than that obtained by vehicle divisions on a direct sale to dealers. The Motorcraft Division expects an economic profit of approximately $2.50 per battery. If the use of the Autolite brand on original equipment led Ford and Lincoln-Mercury dealers to use local jobbers as a source for batteries instead of the vehicle divisions, the Corporation would suffer a $3.00 loss in economic profit per battery (from $5.50 to $2.50). Battery sales now total approximately 400,000 units and the maximum corporate risk, therefore, is a loss of $1,200,000. It is unlikely, of course, that the Corporation would lose even a major por-

tion of the 400,000 battery sales it is now obtaining through franchised dealers and the direct financial risk of using the Autolite name on batteries is, therefore, quite limited. The indirect financial risks are very significant, however, if the dealer organization should consider the use of the Autolite name as the beginning of a Company program that would deteriorate the dealer's position relative to independent garages and service stations. A dealer reaction of this nature might lead the dealers themselves to an increased utilization of independent jobbers in meeting their own parts requirements. Dealer parts loyalty is a major factor in the Company's ability to sustain profits of close to $100 million per year in the replacement market and no action can be recommended that is likely to severely affect dealer attitudes and loyalty.

Conclusions

The Motorcraft Division believes that the use of the Autolite brand on original equipment and replacement spark plugs will not be construed by franchised dealers to represent a change in brand policy. The Division is convinced that unless Ford uses the Autolite name on spark plugs, the value of the name in the replacement market will be seriously impaired. It is, therefore, recommended that the Autolite name be adopted for original equipment spark plugs and for spark plugs distributed by the car and truck divisions to franchised dealers for the replacement market. The Autolite name would, of course, be continued by the Motorcraft Division on spark plugs used for sales through independent distributors and jobbers in the replacement market.

In the case of batteries, the Motorcraft Division believes that whatever additional advantages would accrue to the

Exhibit G-19

Autolite name, if it alone were used on original equipment units, are not sufficient to justify a seriously unfavorable reaction from the franchised dealer organizations. The Division, therefore, recommends that the Autolite name be used in conjunction with whatever private brand names the vehicle divisions wish to use on original equipment batteries.

The Division requests the Marketing Committee's approval of these recommendations.



EXHIBIT G-23

March 21, 1962

Mr. I. A. Duffy

Reference is made to communication of February 26, 1962 addressed to Members of the Operating Policy Committee from R. W. Chambers, Director of the Marketing Planning Office, regarding World-wide FoMoCo Trademark Program. This communication makes no mention of the following trademarks: Autolite, Motorcraft and Car Lite, all of which are merchandised by the Autolite Division. It also does not mention the name Rotunda product line merchandised by the Ford Division P & A Operations.

It appears from the communication that no consideration was given to the above referred to brand names and it can only be assumed that they are not affected, however, it is not safe to make such an assumption and not bring it to the attention of the Operating Policy Committee as to the significance of the brand names merchandised by the Autolite Division.

In the acquisition from the Electric Autolite Company, the brand name "Autolite" became a very important asset. Surveys have shown domestically that it is much better known than FoMoCo. This does not imply that FoMoCo should be dropped, but it does point out that the public is much more aware of the Autolite name.

At the present time, Autolite spark plugs are installed as original equipment on all Ford domestically produced gasoline engines. Replacement spark plugs carry the Autolite identification on the part and are packaged in an Autolite carton showing Ford as manufacturer and merchandised through independent channels of distribution by the 'Auto-

lite Division. This same plug with the Autolite name on the part itself, but packaged in a FoMoCo carton, is merchandised by the P & A Operations of the Ford Division through the dealer organization. To drop the Autolite name would be closing the door to the spark plug business.

Effective approximately June 1, all domestically produced Ford vehicles will have Autolite batteries as original equipment. In addition, all replacement sales, whether through independent channels of distribution or through new car dealers, will carry the Autolite identification. To drop the Autolite name would be a disaster. The Autolite Division merchandises a complete line of ignition and carburetion parts for Ford vehicles in an Autolite package identified as a product of the Ford Motor Company.

In addition, it also merchandises a complete ignition line for Chrysler applications, also packaged in an Autolite carton and identified as a product of Ford Motor Company. Further, a line of fast-moving replacement items for General Motors applications as well as other competitive makes is merchandised in the same way. All of these service parts are merchandised through independent channels of distribution on a world-wide basis. To drop the Autolite name for these service parts would be chaotic to say the least.

On February 1, all glass manufactured by Ford for original equipment and for replacement sales carried the brand name Car Lite. The name FoMoCo was dropped entirely for glass replacement. The Motorcraft brand name is confined to replacement parts for automatic transmissions and is a new program confined to the domestic market.

In summary, it would seem apparent that no consideration was given to other brand names. I believe this should

be brought to the attention of the Marketing Committee so that our position will be clarified.

Looking to the future now that Ford is merchandising through independent channels of distribution on a world-wide basis, it is apparent that some consideration should be given to taking advantage of the Autolite and Car Lite brand names, particularly, regardless of where or by whom they are sold.

J. S. FRENCH

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EXHIBIT G-26

FORD MOTOR COMPANY — AUTOLITE DIVISION
Intra-Company Communication — March 13, 1962

Mr. J. R. Frei
Chief Engineer
Product Engineering Office
Hardware and Accessories Division

During the economy and performance trials at Daytona Beach, Florida, this year, Autolite completely dominated the scene.

For years the Champion Spark Plug Company has literally poured millions of dollars into establishing a performance image of their product. Their investment has paid off well over the years considering that they have had between 45% and 55% of the replacement spark plug business, even in lieu of AC's original equipment penetration of around 50% of the market on General Motors cars.

In 1960, while at the Electric Autolite Company, I felt a more pronounced image of Autolite should be established at the mechanic level as these are the people we really must depend on to move our product off the service station shelves. In that year we hired Fran Hernandez to take over the responsibility of the Performance and Evaluation activity. No one has ever faced a more difficult task than Fran did in convincing the performance specialists to use our products. It is a real tribute to Fran's knowledge of the product and his aggressive salesmanship that Autolite is establishing a formidable image in the minds of the trade.

I believe strongly in this program as a means of communicating with the trade in two important areas, (1) to emphasize the quality and engineering superiority of our products, and (2) to merchandize the fact that Autolite products are performance proven not for just Ford cars but all cars.

Exhibit G-26

For your information, I am sending you copies of the news tabloid that we are mailing to over 300,000 jobbers and service stations illustrating Autolite's clean sweep in all events at Daytona Beach this year, proof positive that Autolite spark plugs are performance proved for all makes of cars. You will note that we have also inserted with each tabloid an Autolite spark plug specification sheet and order blank for all cars, including 1962 applications. Our advertising schedule in some of the trade and performance publications will also emphasize this theme during the next few months.

It is our understanding that General Motors is most unhappy over the fact that the majority of race drivers and car owners that are competing on the stock car circuit with Pontiacs prefer Autolite spark plugs. In fact, a number of Pontiac dealerships are now using Autolite plugs instead of AC. Please be assured that we are minimizing the fact that Pontiacs are dominating the stock car circuit. The fact that a Pontiac won the 500 mile race does not appear in any of our trade advertising. You will note that there is mention of the Pontiacs in the tabloid, which will only be distributed through jobbers and service stations.

We are very hopeful that the new Ford 406 engine will come into its own shortly, thus giving a real opportunity to promote a better performance image of the Ford car through this Division's performance merchandising program.

All of us in the Autolite Division appreciate the fine cooperation that has come from your department in the help given Fran Hernandez by both Jim Oldman and Paul Atwell.

This memorandum is written merely to bring you up to date on what we are doing in this particular area.

E. R. Stroh
General Sales Manager

cc: Mr. J. S. French
Mr. S. J. Gillen

EXHIBIT G-36

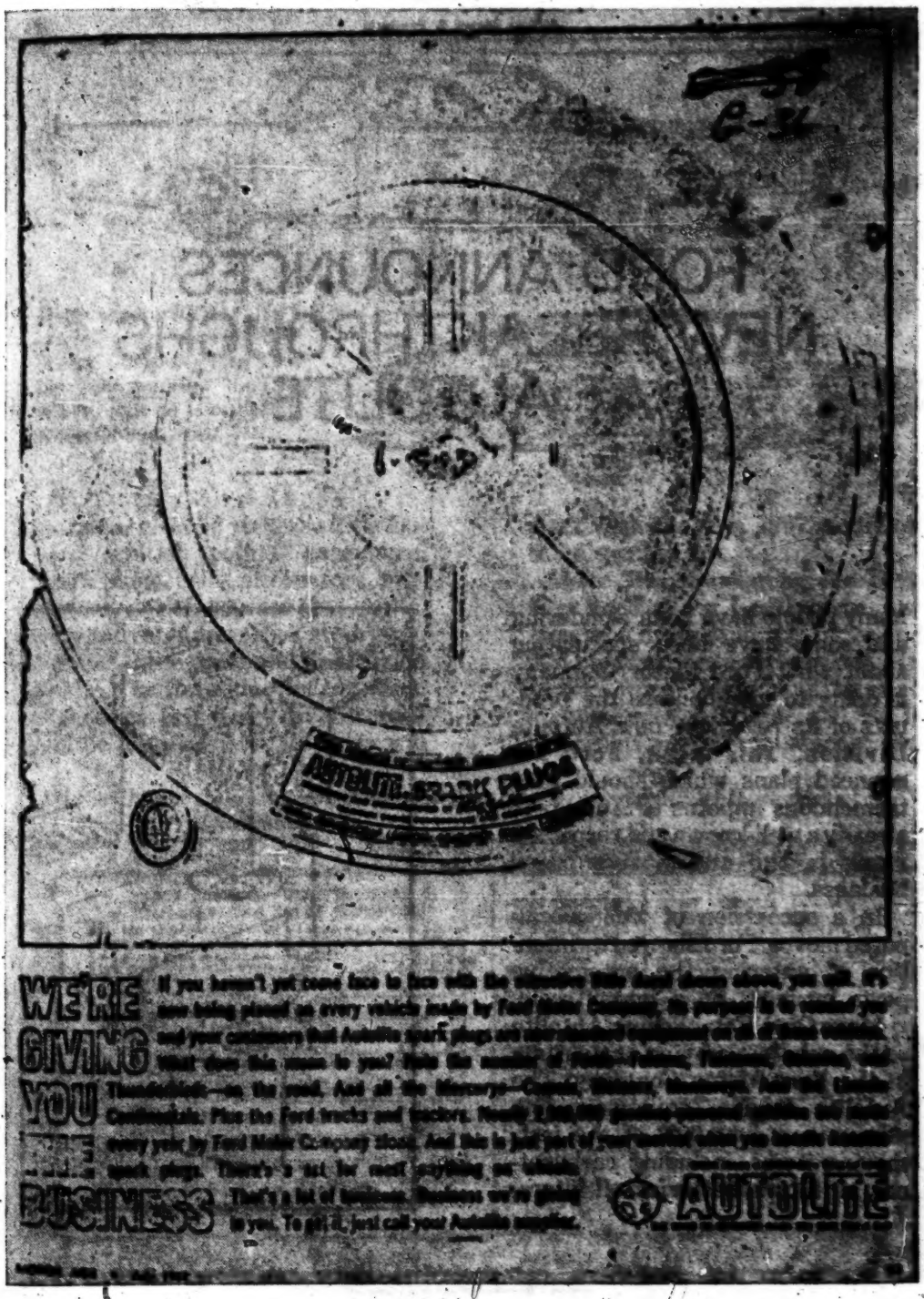

G-36
AUTOLITE SPARK PLUGS
WE'RE GIVING YOU
BUSINESS
AUTOLITE

EXHIBIT G-39

FORD ANNOUNCES NEW BREAKTHROUGHS AT AUTOLITE

Many people have been wondering and some have been speculating about what Ford Motor Company is doing to merchandise the products of its relatively new Autolite Division. This week, Ford announced plans which should give tremendous impetus to Autolite—already a well-known and respected name in the automotive parts business.

In a succession of well coordinated moves, Ford showed its intention of entering the automotive parts business on a larger scale.

Move One: Establishing Autolite as the only fast-moving parts name in the Ford Motor Company. The Autolite original equipment line now covers over 90% of the fast-moving items, including carburetors, air filters, batteries, oil filters,

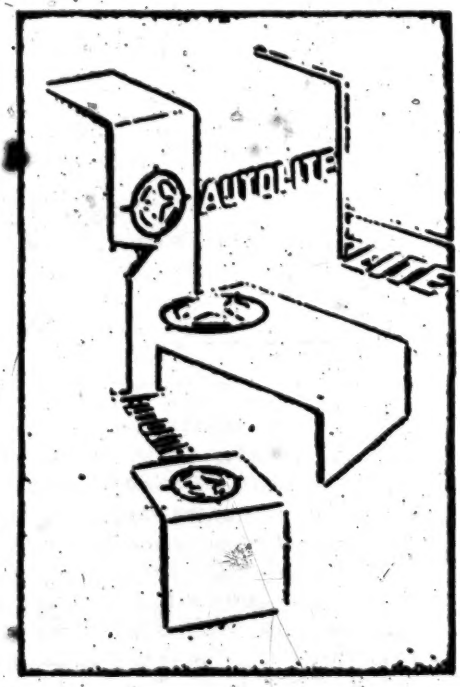
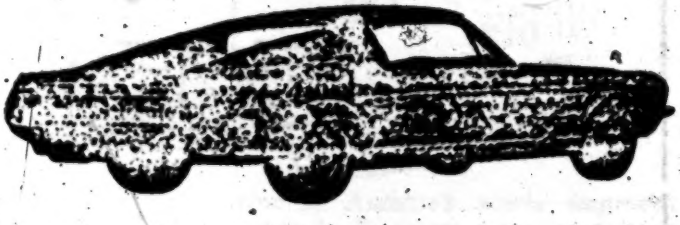


Exhibit G-39



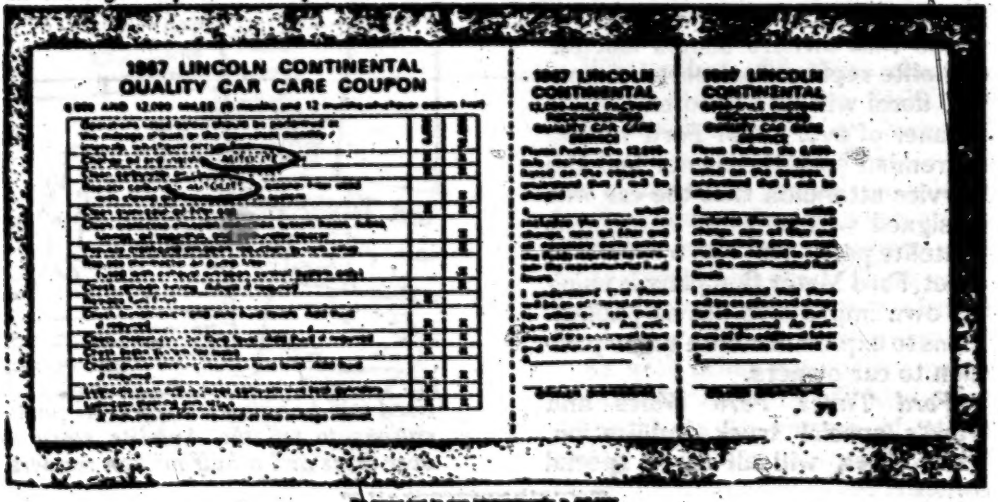
Beginning with the 1967 model year, every Ford Motor Company car, like the two popular models above, will be completely Autolite-equipped.



starters, electric motors, distributors, ignition points, capacitors, spark plugs, coils, alternators, regulators, switches, sending units, wire and cable and shock absorbers. None of these parts will be branded FoMoCo or Rotunda. Instead, each of these parts in every car and truck will be branded Autolite. This will start with the first 1967 model off the assembly line.

Move Two: Realigning the Division itself under Lee Iacocca, the man who made Mustang move and GM blush with embarrassment. Mr. Iacocca would like to have the same success with Autolite, and he is giving his aggressive support and

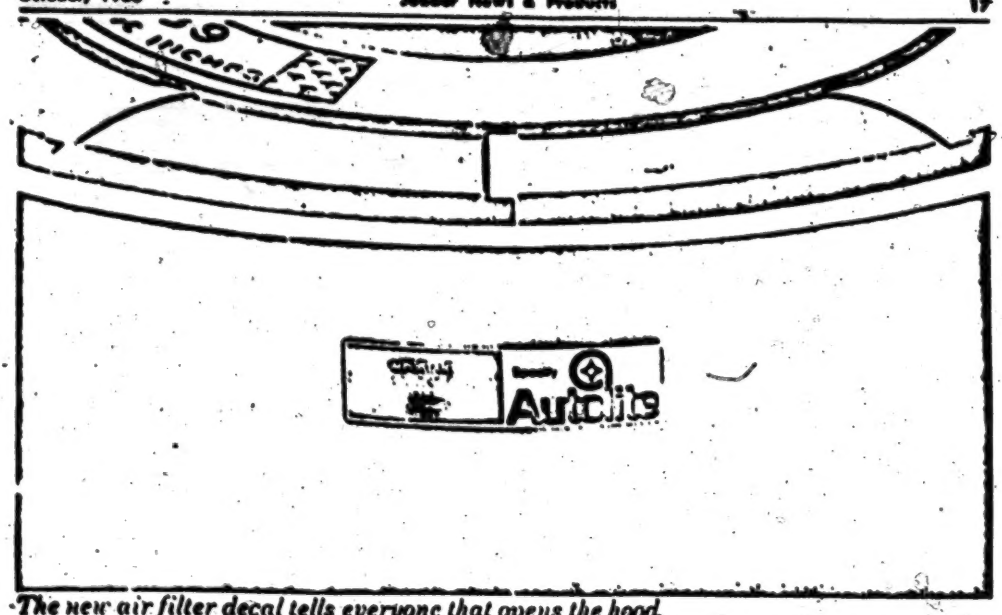
All Ford Motor Company car owners' manuals will recommend Autolite parts as the right replacement parts.


1967 LINCOLN CONTINENTAL
QUALITY CAR CARE COUPON

1967 LINCOLN CONTINENTAL

1967 LINCOLN CONTINENTAL

Exhibit G-39



The new air filter decal tells everyone that opens the hood, "This engine equipped with Autolite parts."

marketing know-how to the Division.

Move Three: Making a continuous effort to convince Ford owners to specify Autolite parts for replacement. The method of approach is widespread and repetitive. For example: All owners' manuals recommend that owners should ask for Autolite replacement parts. A special decal will be placed on the air cleaner of every 1967 Ford vehicle to remind both the owner and the service attendant that the car was designed with original equipment Autolite parts. Not one to overlook a bet, Ford Motor Company is using its own impressive list of publications to explain Autolite's new position to car owners.

Ford Times, *Ford World* and Ford's special truck publication, *Ford Clues*, will all carry special

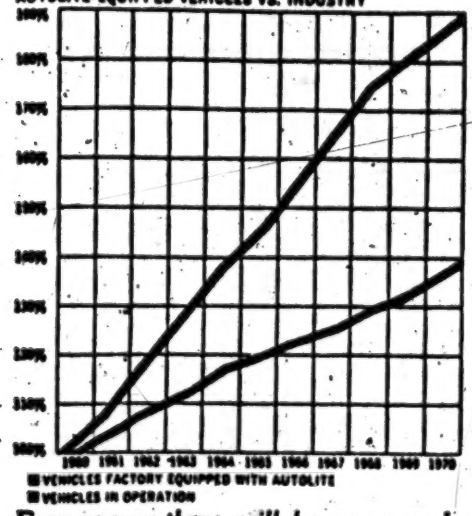


Ford will be using its powerful publications to tell the Autolite story to over three and a half million readers.

Exhibit G-39

GROWTH RATE

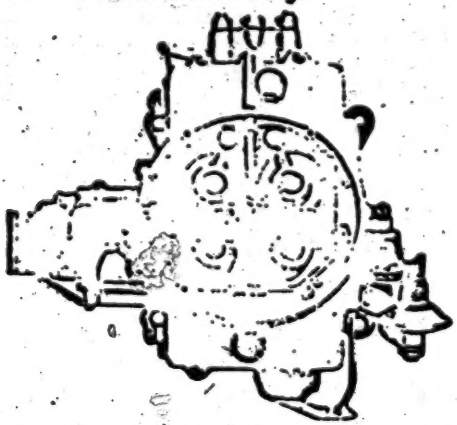
AUTOLITE-EQUIPPED VEHICLES VS. INDUSTRY



Every year, there will be more and more Autolite-equipped cars.

articles on Autolite ignition, carburetion equipment, and other parts. And these magazines reach a total of 3,500,000 car and truck owners every month. A special message explaining the new position of the Autolite Division will be sent to

The "ABC" of carburetion (Autolite Broad Coverage). Maximum coverage with minimum inventory.





One of Autolite's newly improved products. In recent vibration tests it lasted over seven times longer than the closest competitor.

every Ford Motor Company stockholder. And there are more than 300,000 of them.

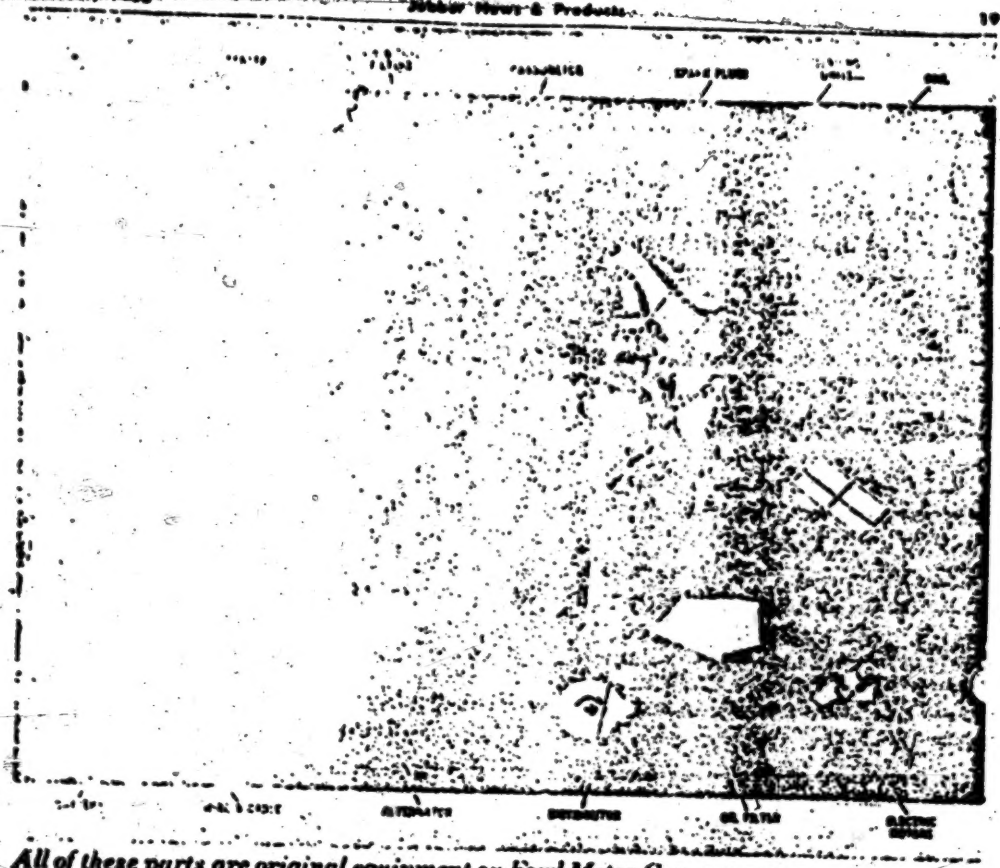
And finally, the announcement of an increase in the Ford Corporate budget is to be applied to promoting the Autolite line. This effort will emphasize the new position of importance of Autolite on television and in national magazines and newspapers.

What effect will these changes have on the more than 24,000,000 Ford Motor Company car owners? With these increased efforts, a lot more motorists should be asking for Autolite. And every year, about 2,000,000 more Ford products will be taking to the road. These combined figures add up to a sizable market in anybody's language.

As with other automotive parts companies, Autolite will also offer its products to owners of other makes of cars. And with the continued improvement of the Autolite

Exhibit G-39

G159
78



All of these parts are original equipment on Ford Motor Company cars. Owners are urged to "keep it under your hood."

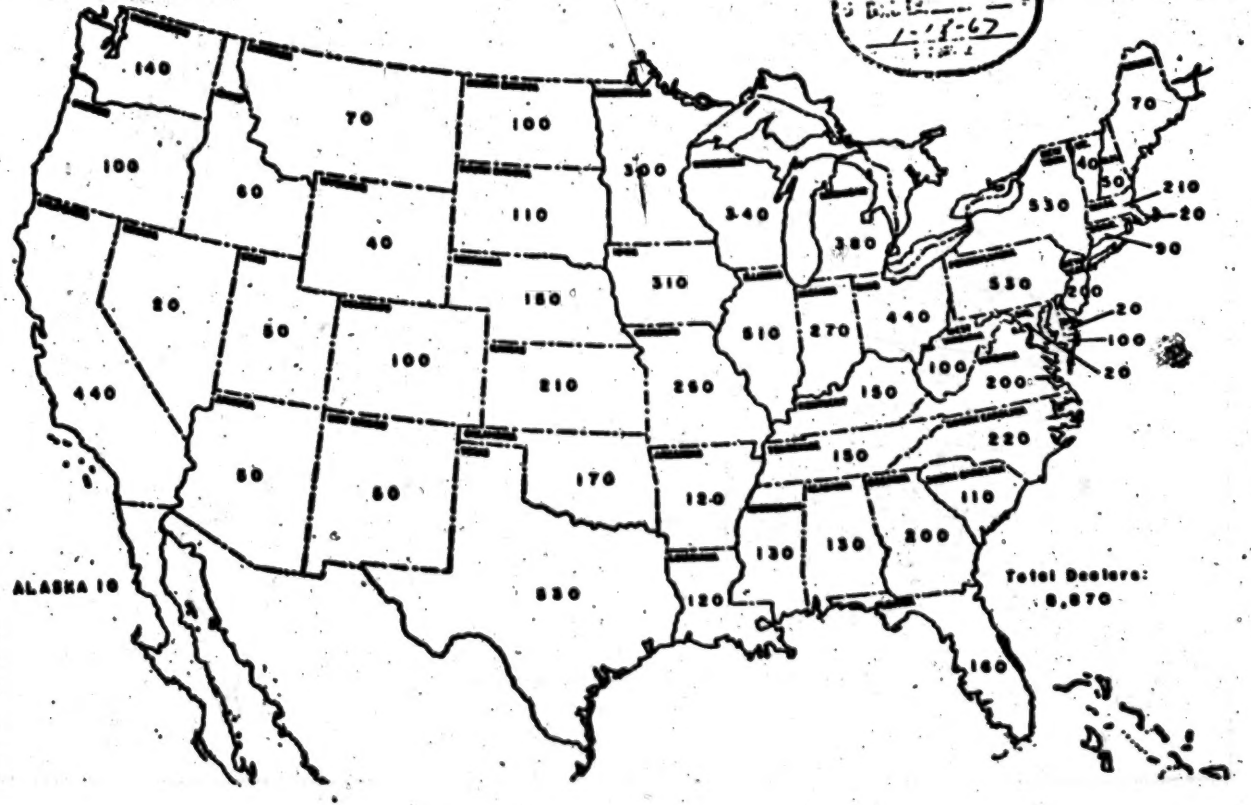
products and the development of new and better ones, a lot of those owners will be accepting Autolite's offer.

To supply the industry with the new demands that the Autolite Division feels it will have, new developments are being made in several areas.

This is Autolite's new oil filter. The two-stage filtering process allows it to absorb and hold ten times more engine-harming "gook" than other leading filters.



FORD MOTOR COMPANY
AUTOMOBILE DEALERS
1958



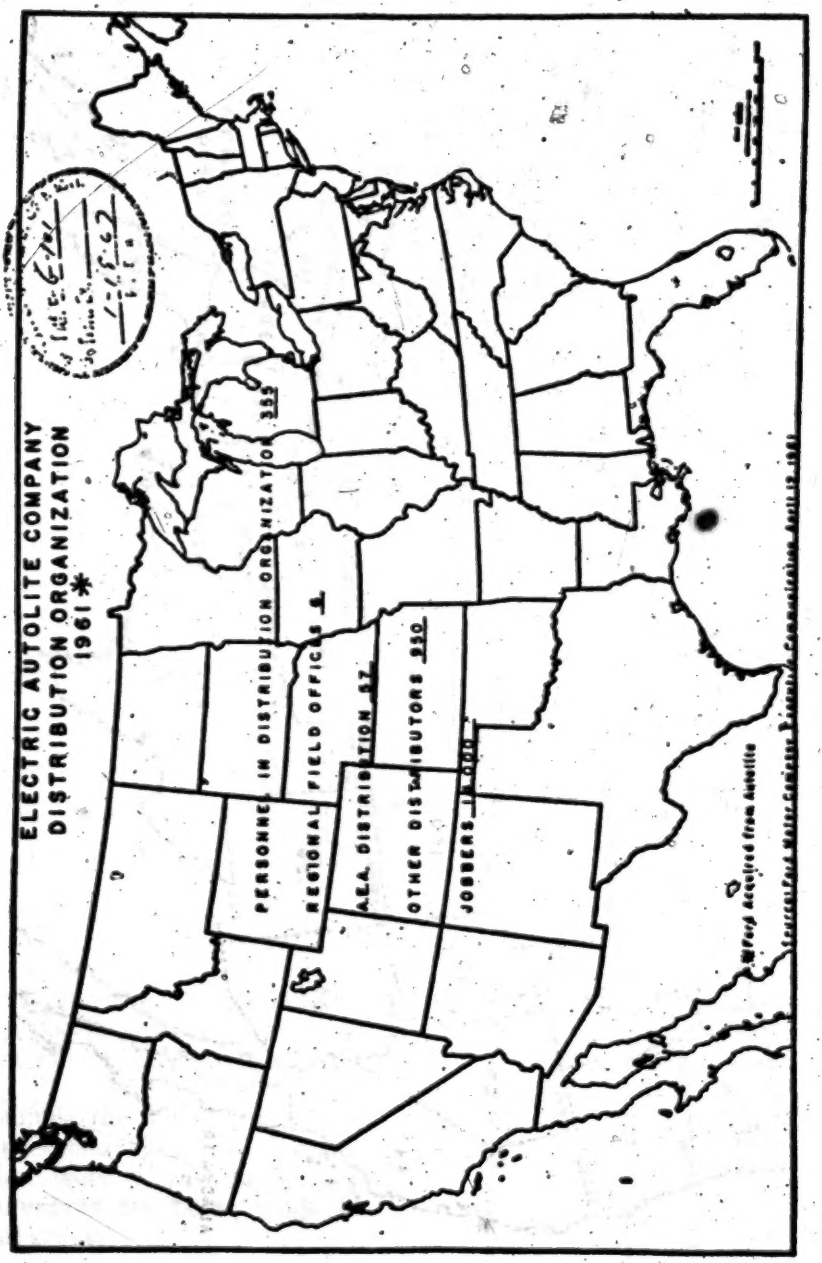
SOURCE: Ford Motor Company Annual Report for 1958, pages 7 through 24.

G-100

EXHIBIT G-100

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EXHIBIT G-101



G101
2.

EXHIBIT G-102

TABLE 1

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS 1955-1964

INDUSTRY TOTALS(1)
(Thousands of Units)

Year	Original Equipment	Replacement	Total
1964	76,153	456,072	532,225
1963	73,776	431,964	505,740
1962	66,296	408,548	474,844
1961*	52,907	392,488	445,395
1960	63,657	338,978	402,635
1959	58,936	359,498	418,434
1958	45,852	326,999(2)	372,851(2)
1957	61,837	325,924	387,761
1956	60,513	316,100	376,613
1955	76,620	300,042	376,662

* Ford Autolite merger April 12, 1961.

(1) Estimated.

(2) Estimated independently of the Census of Manufacturers.

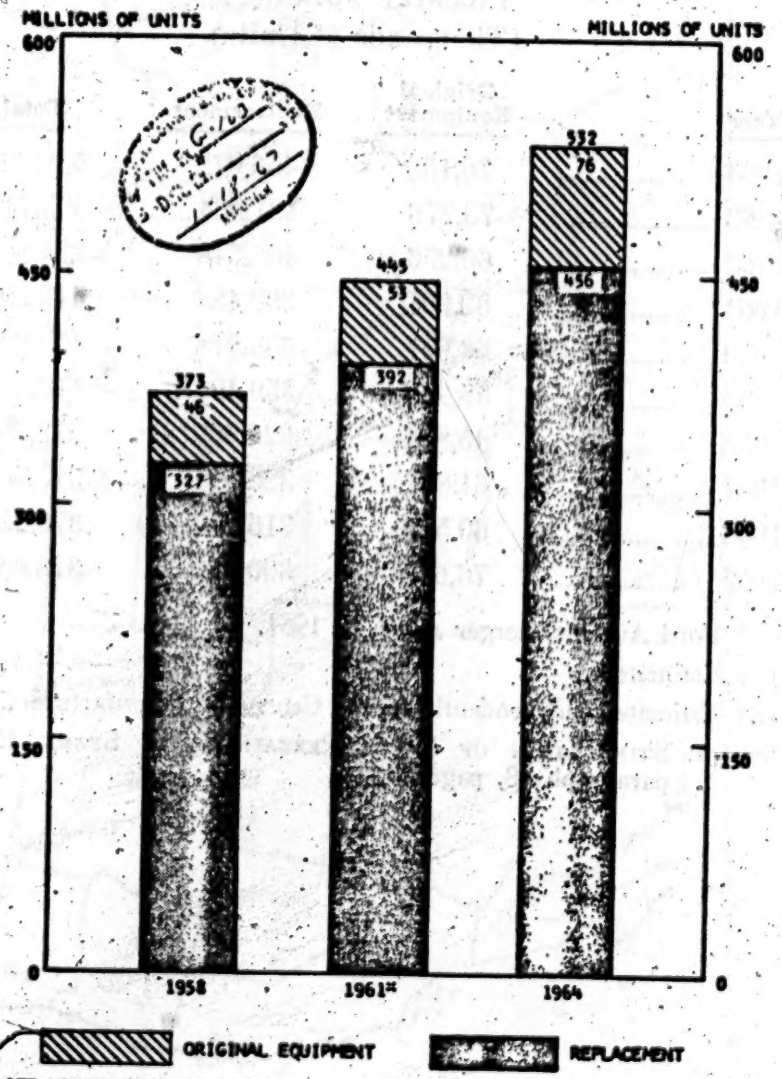
Source: STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 48, page 26.

EXHIBIT G-103

CHART 1

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1958 - 1961 - 1964

SEGMENTS AND GROWTH WITHIN SPARK PLUG INDUSTRY



*FORD AUTOLITE MERGER APRIL 12, 1961.

SOURCE: TABLE 1.

G103
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EXHIBIT G-104

TABLE 4

AUTOMOTIVE TYPE SPARK PLUG DOMESTIC SHIPMENTS 1955-1964

INDUSTRY COMPONENTS(1)
ORIGINAL EQUIPMENT SPARK PLUG SHIPMENTS
(Thousands of Units)

Year	Automobiles	Trucks & Buses	Outboard Motors	Other Products	Total(2)
1964	57,099	9,912	960	8,182	76,153
1963	55,568	9,162	889	8,157	73,776
1962	49,365	7,698	884	8,349	66,296
1961*	38,272	6,951	842	6,842	52,907
1960	47,944	7,407	1,149	7,157	63,657
1959	41,393	7,466	1,326	8,751	58,936
1958	31,737	5,754	1,237	7,124	45,852
1957	46,808	7,247	1,347	6,435	61,837
1956	44,117	7,334	1,574	7,488	60,513
1955	60,138	8,361	1,252	6,869	76,620

* Ford Autolite merger April 12, 1961.

(1) Estimated.

(2) Excludes an undetermined number of OEM spark plugs installed in aircraft.

Source: STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 49, page 27.

TABLE 3

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1955-1964

FORD'S SPARK PLUG PERFORMANCE, PURCHASES AND OPERATION
(Thousands of Units)

	1955	1956	1957	1958	1959	1960	1961*	1962	1963	1964
Champion (Purchases)										
Original Equipment (Units)	22,579	15,676	17,005	11,573	16,756	16,141	6,839	—	—	—
Share of Industry (%) ...	29.5	25.9	27.5	25.2	28.4	25.4	12.9	—	—	—
Replacement (Units)	18,080	16,890	19,004	13,886	18,475	22,534	6,459	—	—	—
Share of Industry (%) ...	6.0	5.3	5.8	4.2	5.1	6.6	1.6	—	—	—
Total (Units)	40,659	32,566	36,009	25,459	35,231	38,675	13,298	—	—	—
Share of Industry (%) ...	10.8	8.6	9.3	6.8	8.4	9.6	3.0	—	—	—
ELTRA (Purchases)										
Original Equipment (Units)	—	—	—	—	—	—	—	None	None	None
Share of Industry (%) ...	—	—	—	—	—	—	—	—	—	—
Replacement (Units)	—	—	—	—	—	—	—	4,695	4,927	2,233
Share of Industry (%) ...	—	—	—	—	—	—	—	1.1	1.1	0.5
Total (Units)	—	—	—	—	—	—	—	4,695	4,927	2,233
Share of Industry (%) ...	—	—	—	—	—	—	—	1.0	1.0	0.4
Ford Autolite (Performance)										
Original Equipment (Units)	—	—	—	—	—	—	7,342(1)	17,504	19,209	20,463
Share of Industry (%) ...	—	—	—	—	—	—	13.9	26.4	26.0	26.9
Replacement (Units)	—	—	—	—	—	—	38,071(1)	57,010	55,073	66,663
Share of Industry (%) ...	—	—	—	—	—	—	9.7	14.0	12.7	14.6
Total (Units)	—	—	—	—	—	—	45,413(1)	74,514	74,282	87,126
Share of Industry (%) ...	—	—	—	—	—	—	10.2	15.7	14.7	16.4

* Ford Autolite merger April 12, 1961.

(1) April 12 to December 31.

Source: STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 63, page 36; paragraph 60, page 35; and paragraph 61, page 35.

EXHIBIT G-105

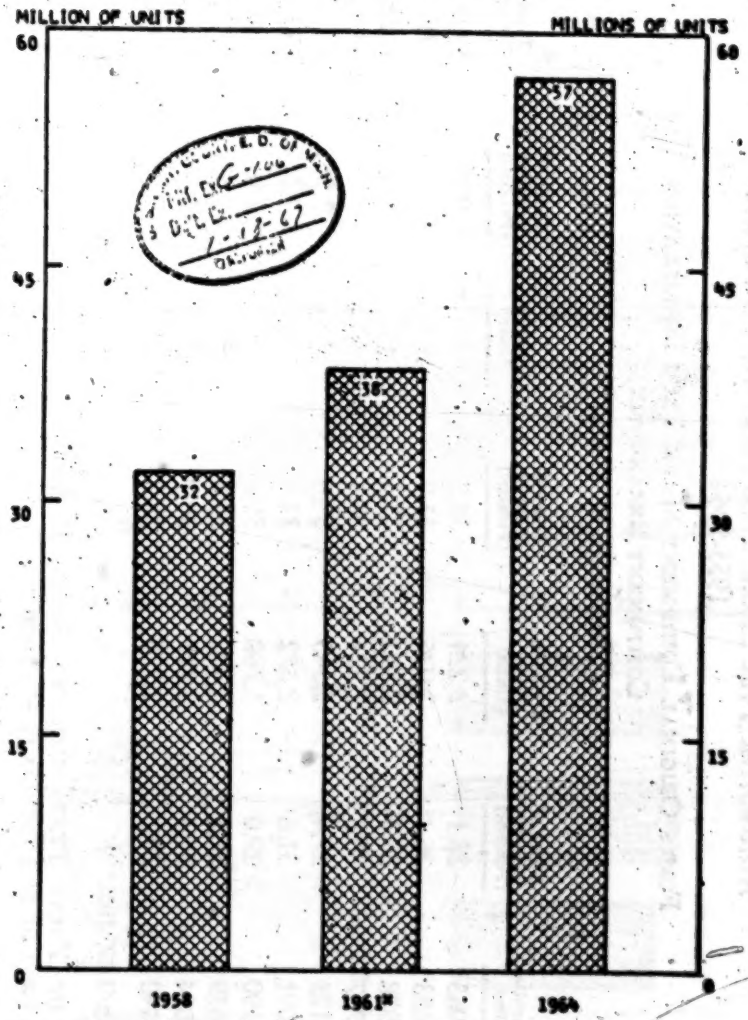
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EXHIBIT G-106

CHART 6

AUTOMOTIVE TYPE SPARK PLUG DOMESTIC SHIPMENTS
1958 - 1961 - 1964

GROWTH OF OE SPARK PLUG UTILIZATION IN AUTOMOBILES



G-106
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*FORD AUTOLITE MERGER APRIL 12, 1961.

SOURCE: TABLE 4.

G106
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TABLE 5

AUTOMOTIVE TYPE SPARK PLUG DOMESTIC SHIPMENTS
1955-1964

FORD'S ORIGINAL EQUIPMENT SPARK PLUG INSTALLATION
COMPONENT BREAKDOWN
(Thousands of Units)

Year	Automobiles (Units)	Share of Industry (Percent)	Trucks & Buses (Units)	Share of Industry (Percent)	Tractors (Units)	Share of Industry (Percent)	Total (Units)	Share of Industry Total (Percent)
1964	16,065	28.1	3,224	32.5	71	0.9	19,360	25.4
1963	14,653	26.4	2,926	31.9	115	1.4	17,694	24.0
1962	13,978	28.3	2,563	33.3	82	1.0	16,623	25.1
1961*	11,797	30.8	2,324	33.4	60	0.9	14,181	26.8
1960	13,123	27.4	2,343	31.6	71	1.0	15,537	24.4
1959	13,091	31.6	2,372	31.8	131	1.5	15,594	26.5
1958	9,190	29.0	1,760	30.6	139	2.0	11,089	24.2
1957	14,639	31.3	2,480	34.2	159	2.5	17,278	27.9
1956	13,014	29.5	2,217	30.2	156	2.1	15,387	25.4
1955	17,490	29.1	2,776	33.2	267	3.9	20,533	26.8

* Ford Autolite merger April 12, 1961.

Source: STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 64, page 37 and paragraph 49, page 27.

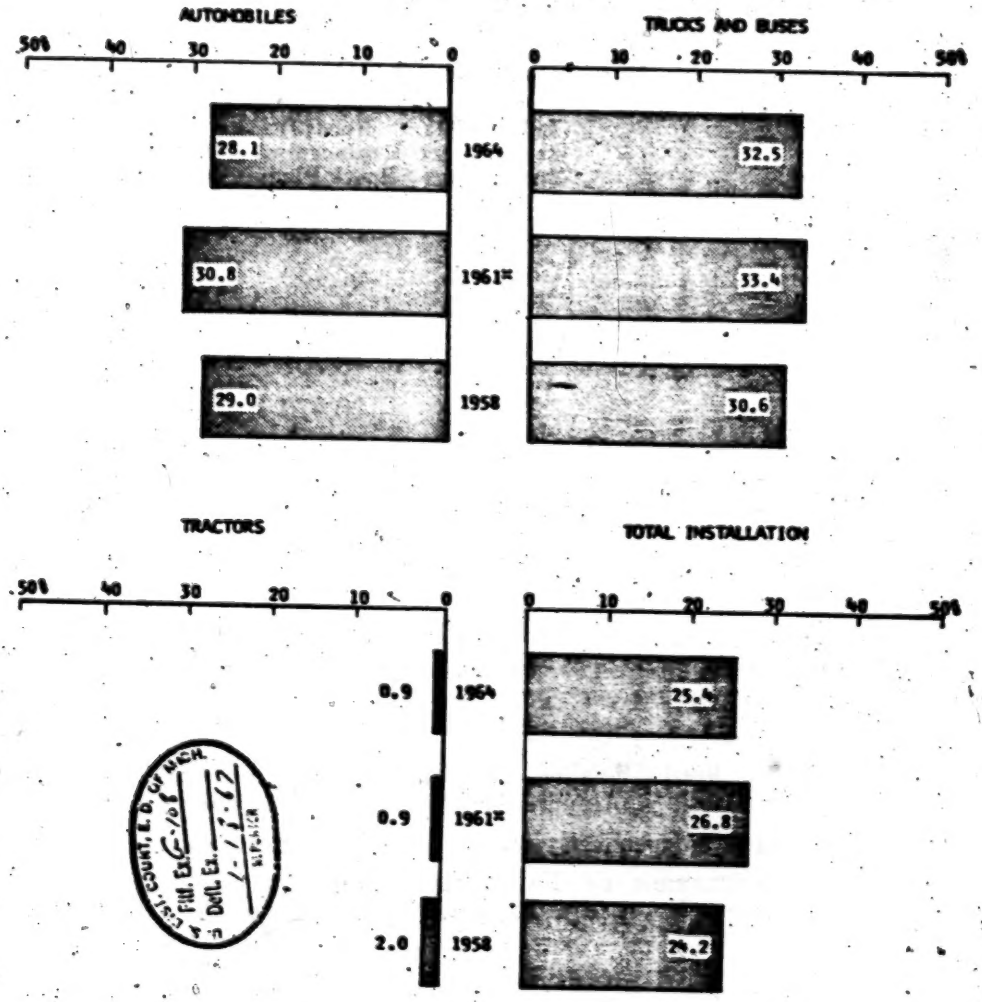
EXHIBIT G-107

EXHIBIT G-108

CHART 7

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1958 - 1961 - 1964

FORD'S ORIGINAL EQUIPMENT INSTALLATION
SHARE OF INDUSTRY



U.S. DIST. COURT, E. D. OF MICH.
Plff. Ex. G-108
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1-17-67

*FORD AUTOLITE MERGER APRIL 12, 1961.

SOURCE: TABLE 5.

G-108

EXHIBIT G-109

TABLE 6

AUTOMOTIVE TYPE SPARK PLUG DOMESTIC SHIPMENTS 1955-1964

REPLACEMENT FIELD
FORD'S REPLACEMENT SALES AND SHARES
(Thousands of Units)

Year	Industry(1) Replacement Spark Plugs	Ford(2) Replacement Spark Plugs	Share Of Industry (Percent)
1964	456,072	73,546	16.1
1963	431,964	67,432	15.6
1962	408,548	68,047	16.7
1961*	392,488	48,761	12.4
1960	338,978	20,870	6.2
1959	359,498	20,474	5.7
1958	326,999(3)	14,708	4.5
1957	325,924	17,398	5.3
1956	316,100	17,141	5.4
1955	300,042	18,968	6.3

* Ford Autolite merger April 12, 1961.

(1) Estimated.

(2) Sold by Ford Division, Lincoln Mercury Division, Tractor Operations U. S., Autolite Division, and General Parts Division.

(3) Estimated independently of the Census of Manufactures.

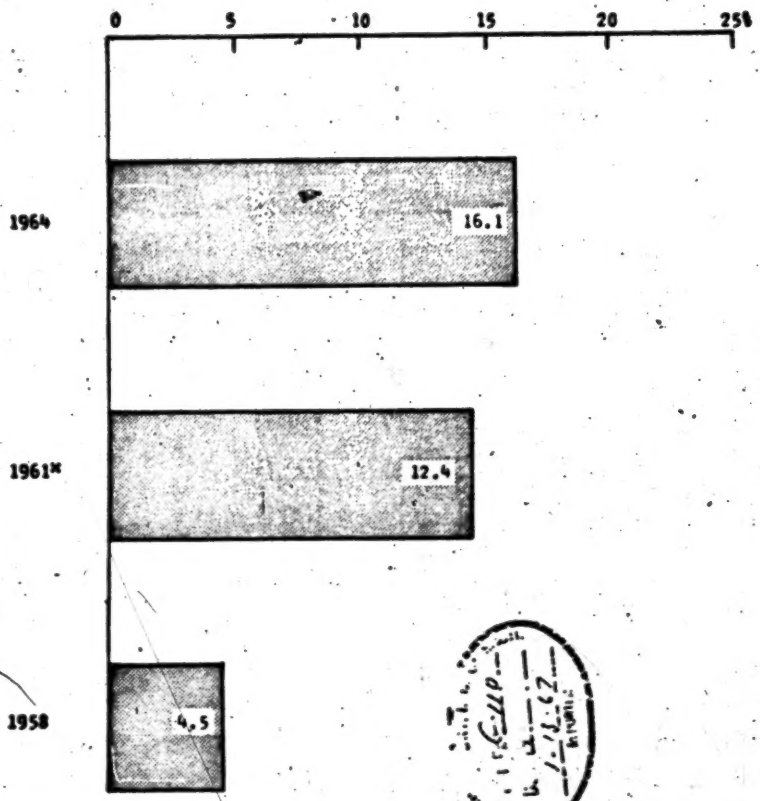
Source: STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph , page 36; paragraph 65, page 37.

EXHIBIT G-110

CHART 8

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1958 - 1961 - 1964

REPLACEMENT FIELD
FORD'S REPLACEMENT SALES AND SHARES



*FORD AUTOLITE MERGER APRIL 12, 1961.

SOURCE: TABLE 6.

G110
12.

EXHIBIT G-111

TABLE 10

AUTOMOTIVE TYPE SPARK PLUG & DOMESTIC SHIPMENTS 1955-1964

ORIGINAL EQUIPMENT INSTALLATION

FORD'S SPARK PLUG PERFORMANCE, PURCHASES AND OPERATION

(Thousands of Units)

Year	Ford's Utilization of Spark Plugs Units	Non-Captive Supplied		Captive Supplied(1)	
		Units	Share	Units	Share
1964	19,360	—	—	19,360	100.0
1963	17,694	—	—	17,694	100.0
1962	16,623	—	—	16,623	100.0
1961*	14,181	6,839	48.2	7,342(2)	51.8
1960	15,537	15,537	100.0		
1959	15,594	15,594	100.0		
1958	11,089	11,089	100.0		
1957	17,278	17,278	100.0		
1956	15,387	15,387	100.0		
1955	20,533	20,533	100.0		

* Ford Autolite merger April 12, 1961.

(1) Spark Plugs produced by automobile manufacturers.

(2) April 12 to December 31, 1961.

Source: STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 64, pages 37 and 59, page 34.

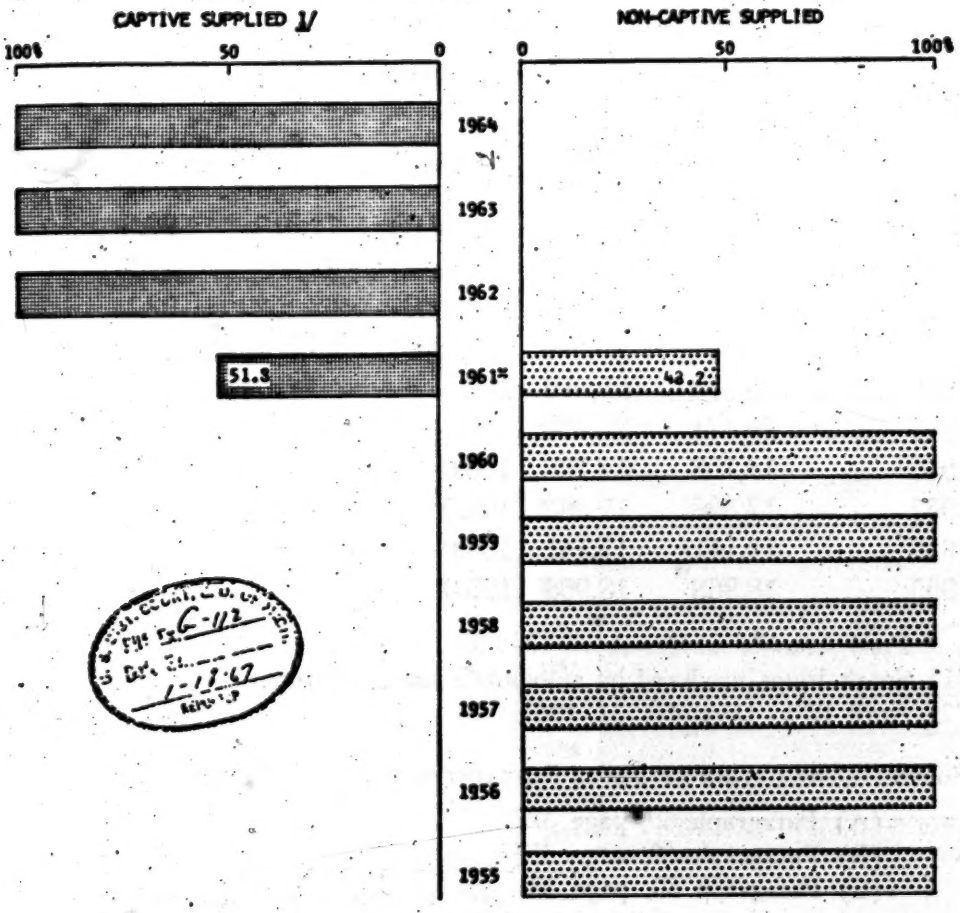
EXHIBIT G-112

CHART 12

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1955 - 1964

ORIGINAL EQUIPMENT INSTALLATION
FORD'S SPARK PLUG PERFORMANCE

SHARES



Fed. Trade Comm. U.S.
Exhibit No. G-112
Date 1-13-67
Reporter

* FORD AUTOLITE MERGER APRIL 12, 1961.
1/ SPARK PLUGS PRODUCED BY AUTOMOBILE MANUFACTURERS.

SOURCE: TABLE NO. 10.

G112
R.

EXHIBIT G-113

TABLE 11

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1955-1964

REPLACEMENT SALES
FORD'S SELLING PERFORMANCE

(Thousands of Units)

Year	Ford's Selling Performance(A)	Non-Captive Supplied		Captive Supplied(1)	
	Units	Units	Share	Units	Share
1964	73,546	2,233	3.0(B)	71,313	97.0
1963	67,432	4,927	7.3(B)	62,505	92.7
1962	68,047	4,695	6.9(B)	63,352	93.1
1961*	48,761	10,690	21.9(C)	38,071(2)	78.1
1960	20,870	20,870	100.0		
1959	20,474	20,474	100.0		
1958	14,708	14,708	100.0		
1957	17,398	17,398	100.0		
1956	17,141	17,141	100.0		
1955	18,968	18,968	100.0		

* Ford Autolite merger April 12, 1961.

(1) Spark Plugs produced by automobile manufacturers.

(2) April 12 to December 31, 1961.

Source: STIPULATION OF FACTS PERTAINING TO SPARK PLUGS.

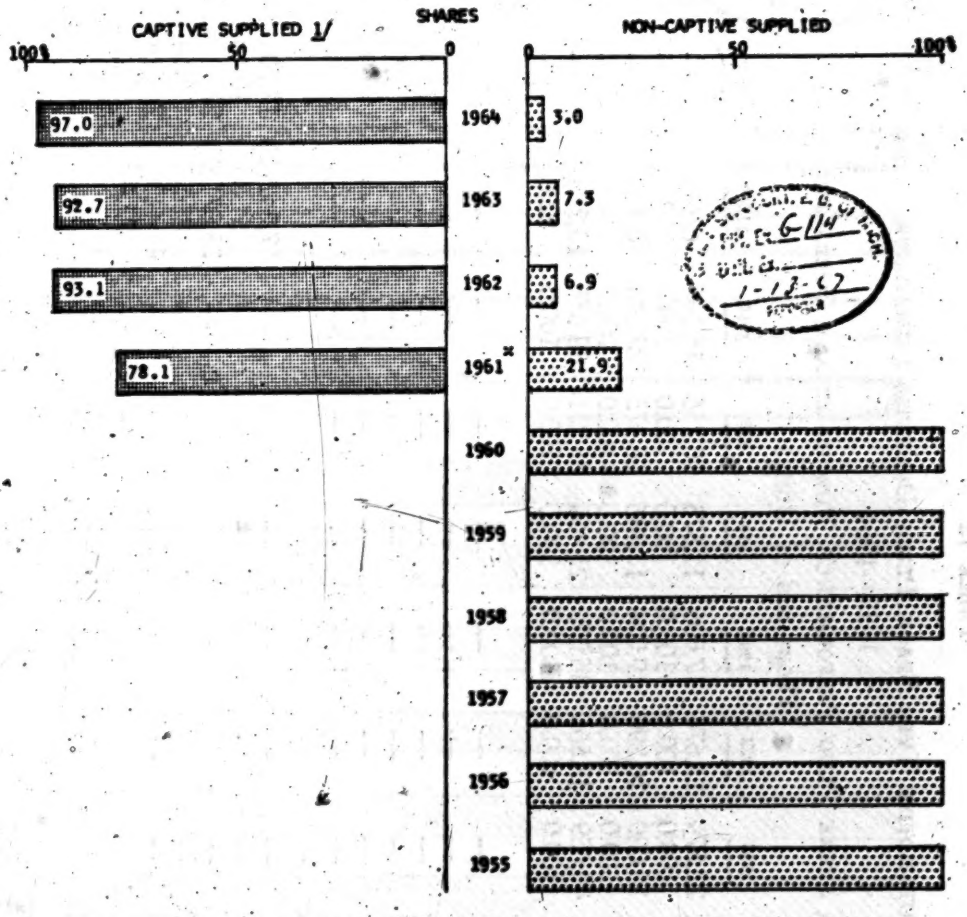
(A) Paragraph 65, page 37.
(B) Paragraph 60, page 35.
(C) Paragraph 59, page 34.

EXHIBIT G-114

CHART 13

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1955 - 1964

REPLACEMENT SALES
FORD'S SELLING PERFORMANCE



G-114
1-12-67

* FORD AUTOLITE MERGER APRIL 12, 1961.
1/ SPARK PLUGS PRODUCED BY AUTOMOTIVE MANUFACTURERS.

SOURCE: TABLE NO. 11.

G 114

TABLE 12

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1955—1964
FORD'S SPARK PLUG PERFORMANCE, PURCHASES AND OPERATION
(Thousands of Units)

	1955	1956	1957	1958	1959	1960	1961*	1962	1963	1964
Champion (Purchases)										
Original Equipment (Units)	22,579	15,676	17,005	11,573	16,756	16,141	6,839	—	—	—
Share of Ford's Needs (%)	100.0	100.0	100.0	100.0	100.0	100.0	48.2	—	—	—
Replacement (Units)	18,080	16,890	19,004	13,886	18,475	22,534	6,459	—	—	—
Share of Industry (%)	100.0	100.0	100.0	100.0	100.0	100.0	14.5	—	—	—
Total (Units)	40,659	32,566	36,009	25,459	35,231	38,675	13,298	—	—	—
Share of Ford's Needs (%)	100.0	100.0	100.0	100.0	100.0	100.0	22.6	—	—	—
ELTRA (Purchases)										
Original Equipment (Units)	—	—	—	—	—	—	—	None	None	None
Share of Ford's Needs (%)	—	—	—	—	—	—	—	—	—	—
Replacement (Units)	—	—	—	—	—	—	—	4,695	4,927	2,233
Share of Ford's Needs (%)	—	—	—	—	—	—	—	7.6	8.2	3.2
Total (Units)	—	—	—	—	—	—	—	4,695	4,927	2,233
Share of Ford's Needs (%)	—	—	—	—	—	—	—	5.9	6.2	2.5
Ford Autolite (Performance)										
Original Equipment (Units)	—	—	—	—	—	—	7,342(1)	17,504	19,209	20,463
Share of Ford's Needs (%)	—	—	—	—	—	—	51.8	100.0	100.0	100.0
Replacement (Units)	—	—	—	—	—	—	38,071(1)	57,010	55,073	66,663
Share of Ford's Needs (%)	—	—	—	—	—	—	85.5	92.4	91.8	96.8
Total (Units)	—	—	—	—	—	—	45,413	74,514	74,282	87,126
Share of Ford's Needs (%)	—	—	—	—	—	—	77.4	94.1	93.8	97.5

* Ford Autolite merger April 12, 1961.
(1) April 12 to December 31.

Source: STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 63, page 36; paragraph 60, page 35 and paragraph 61, page 35.

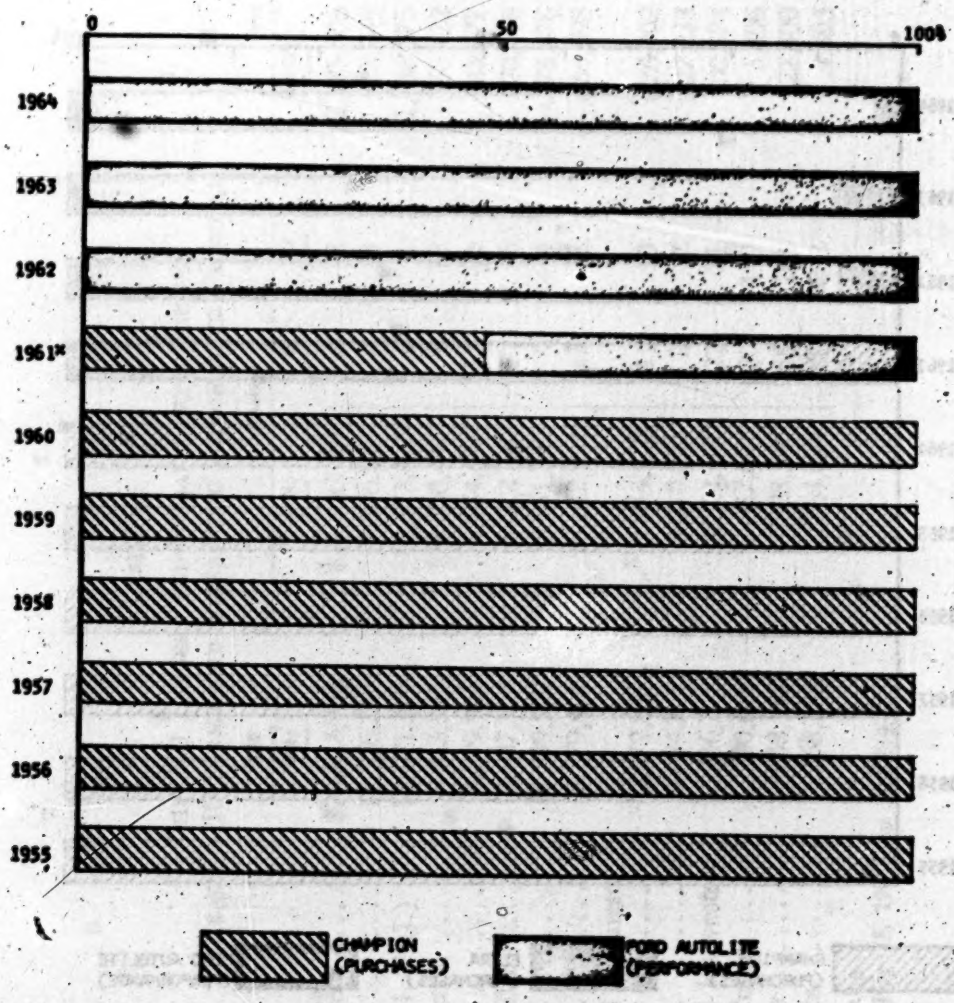
EXHIBIT G-115

EXHIBIT G-116

CHART 14
AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1955 - 1964

FORD'S SPARK PLUG PERFORMANCE AND OPERATION
ORIGINAL EQUIPMENT INSTALLATION

SHARE OF FORD'S NEEDS



*FORD AUTOLITE MERGER APRIL 12, 1961.

SOURCE: TABLE 12.

G 116
AJ.

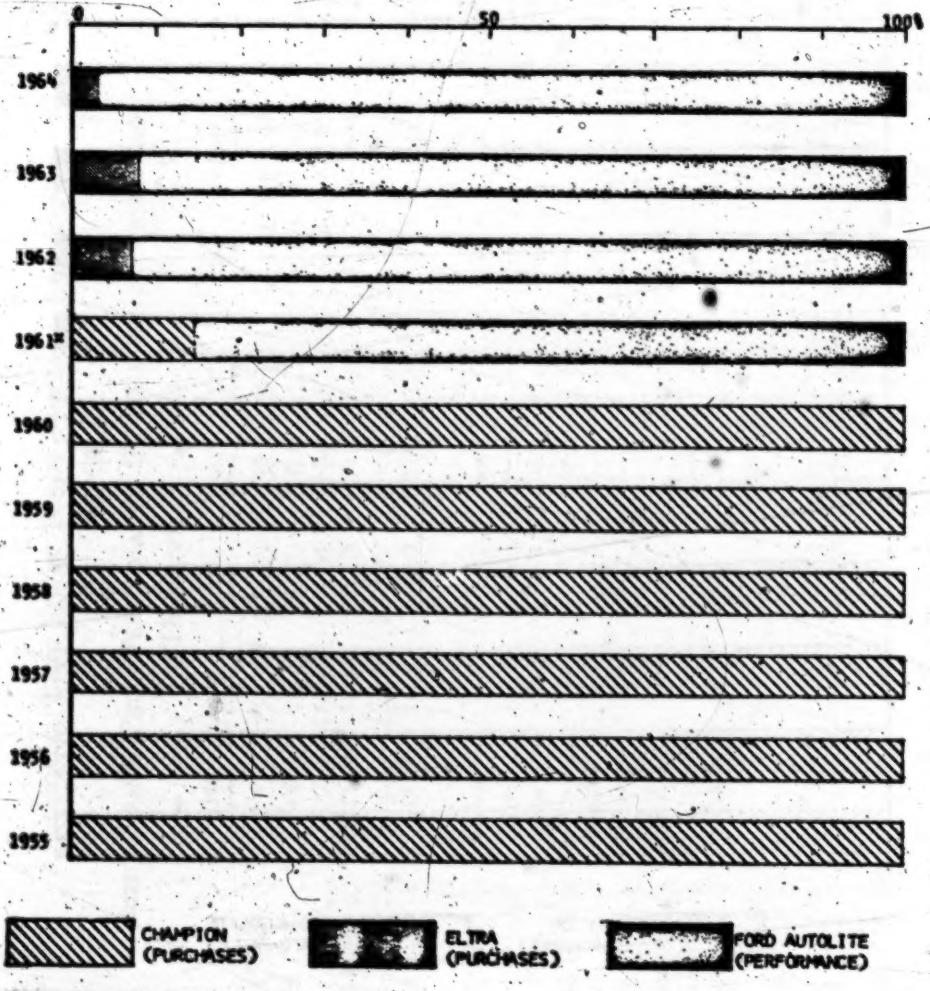
EXHIBIT G-117

CHART 15

AUTOMOTIVE TYPE SPARK PLUGS DOMESTIC SHIPMENTS
1955 - 1964

FORD'S SPARK PLUG PERFORMANCE AND OPERATION
REPLACEMENT SALES

SHARE OF FORD'S NEEDS



*FORD AUTOLITE MERGER APRIL 12, 1961.

SOURCE: TABLE 12.

G117
22.

EXHIBIT G-137

TABLE 23

THE 500 LARGEST INDUSTRIAL CORPORATIONS*
LEADING 10 FIRMS AND REMAINING AUTOMOTIVE PRODUCERS

Rank '65	Rank '64	Company	1965 Sales (000)	Assets (000)	Assets '65	Assets '64	Net Profit (000)	Net Profit '65	Net Profit '64
1	1	General Motors	$20,733,982	$12,586,170	2	2	$2,125,606	1	1
2	2	Ford Motor	11,536,789	7,596,834	3	3	703,049	3	4
3	3	Standard Oil (N.J.)	11,471,529	13,073,437	1	1	1,035,675	2	2
4	4	General Electric	6,213,595	4,300,440	8	12	355,122	9	10
5	6	Chrysler	5,299,935	2,934,488	13	14	233,377	14	13
6	5	Socony Mobil Oil	4,907,504	5,212,380	6	6	320,116	10	9
7	7	U. S. Steel	4,399,590	5,451,740	4	4	275,476	11	11
8	8	Texaco	3,779,406	5,342,903	5	5	636,698	4	3
9	9	International Business Machines	3,572,825	3,744,918	11	10	476,902	5	6
10	10	Gulf Oil	3,384,742	5,210,833	7	7	427,233	6	7
19	19	International Harvester	2,336,719	1,814,491	22	21	100,574	33	28
63	55	American Motors	990,619	457,002	120	119	5,206	429	130
109	115	White Motor	638,197	328,287	158	161	22,400	176	183
184	200	Mack Trucks	368,388	264,039	200	208	4,303	451	442

* Fortune 500, Ranked by Sales.

Source: Fortune Magazine, July 15, 1966—pp. 232-249.

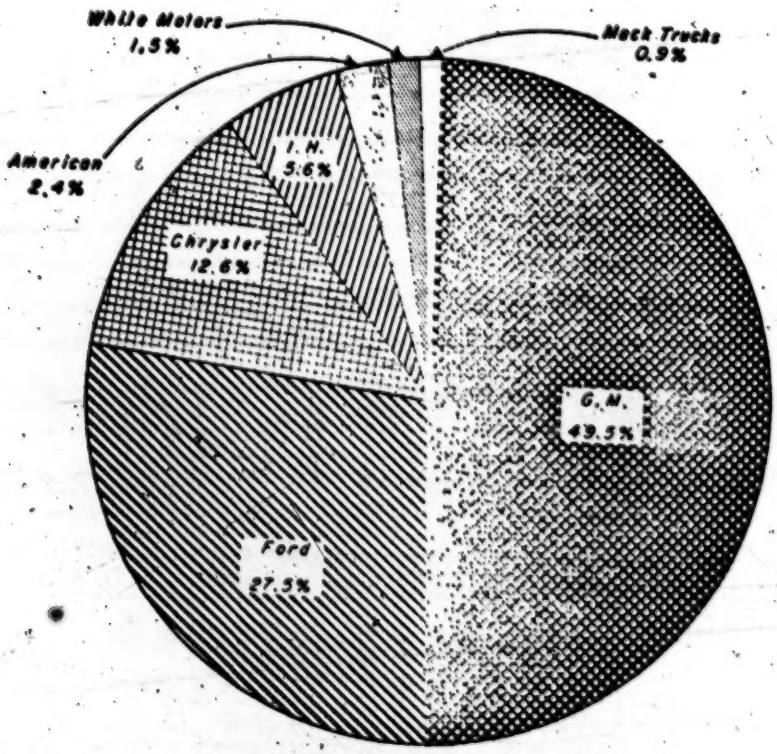
EXHIBIT G-138

CHART 23

AUTOMOTIVE MANUFACTURERS
WITHIN THE 500 LARGEST INDUSTRIAL CORPORATIONS

1963

SHARE FOR EACH OF 7 FIRMS



TOTAL SALES $41,904,629,000
REPRESENTS OVERALL SALES FOR 7 AUTOMOTIVE MANUFACTURERS

SOURCE: TABLE 23

U.S. DIST. COURT, E.D. Mich.
Plff. Ex. G-138
Deft. Ex.
1-18-67
REPORTER

G138
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EXHIBIT G-139

TABLE 24

UNITED STATES AUTOMOTIVE INDUSTRY
1955—1964

TOTAL DOMESTIC PRODUCTION

(Thousands of Units)

Year	Automobiles(A) (Units)	Trucks(B) (Units)	Tractors(C) (Units)
1964	7,739	1,561	213
1963	7,637	1,463	203
1962	6,935	1,254	169
1961*	5,516	1,128	157
1960	6,696	1,198	128
1959	5,594	1,140	240
1958	4,244	871	209
1957	6,115	1,090	202
1956	5,802	1,104	183
1955	7,942	1,246	290

* Ford Autolite merger April 12, 1961.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 5, page 3.

(B) Ward's 1965 Automotive Yearbook, pages 74 and 75.

(C) Ford Defendant Answer to Government Interrogatory No. 12.

EXHIBIT G-140

TABLE 25

UNITED STATES AUTOMOTIVE INDUSTRY
1955—1964

DOMESTIC AUTOMOBILE PRODUCTION
INDUSTRY COMPONENTS

(Thousands of Units)

		(Units)	(Share)
1964	United States Total	7,739	100.0
	General Motors	3,957	51.1
	Ford Motor Co.	2,146	27.7
	Chrysler Corp.	1,242	16.0
	American Motors	394	5.1
	Studebaker(1)	••	•••
1963	United States Total	7,637	100.0
	General Motors	4,077	53.4
	Ford Motor Co.	1,964	25.7
	Chrysler Corp.	1,048	13.7
	American Motors	480	6.3
	Studebaker(1)	68	0.9
1962	United States Total	6,935	100.0
	General Motors	3,742	54.0
	Ford Motor Co.	1,935	27.9
	Chrysler Corp.	717	10.3
	American Motors	455	6.6
	Studebaker(1)	87	1.3
1961*	United States Total	5,516	100.0
	General Motors	2,727	49.4
	Ford Motor Co.	1,690	30.6
	Chrysler Corp.	649	11.8
	American Motors	372	6.7
	Studebaker(1)	79	1.4
1960	United States Total	6,696	100.0
	General Motors	3,193	47.7
	Ford Motor Co.	1,892	28.3
	Chrysler Corp.	1,019	15.2
	American Motors	406	7.3
	Studebaker(1)	106	1.6

Exhibit G-140

		(Units)	(Share)
1959	United States Total	5,594	100.0
	General Motors	2,555	45.7
	Ford Motor Co.	1,745	31.2
	Chrysler Corp.	738	13.2
	American Motors	401	7.2
	Studebaker(1)	154	2.8
1958	United States Total	4,244	100.0
	General Motors	2,169	51.1
	Ford Motor Co.	1,219	28.7
	Chrysler Corp.	581	13.7
	American Motors	217	5.1
	Studebaker(1)	57	1.3
1957	United States Total	6,115	100.0
	General Motors	2,816	46.1
	Ford Motor Co.	1,890	30.9
	Chrysler Corp.	1,222	20.0
	American Motors	114	1.9
	Studebaker(1)	73	1.2
1956	United States Total	5,802	100.0
	General Motors	3,062	52.8
	Ford Motor Co.	1,669	28.8
	Chrysler Corp.	870	15.0
	American Motors	104	1.8
	Studebaker(1)	96	1.7
1955	United States Total	7,942	100.0
	General Motors	3,990	50.2
	Ford Motor Co.	2,241	28.2
	Chrysler Corp.	1,362	17.2
	American Motors	162	2.0
	Studebaker(1)	182	2.3
	Kaiser Jeep (Willys)(2)	6	0.1

NOTE: Detail may not add to totals due to rounding. Percentages may not add to 100.0% due to rounding.

* Ford Autolite merger April 12, 1961.

** Less than 500 units.

*** Less than 0.05%.

(1) Includes Studebaker-Packard Corporation.

(2) Ward's 1965 Automotive Yearbook, pages 72 and 73.

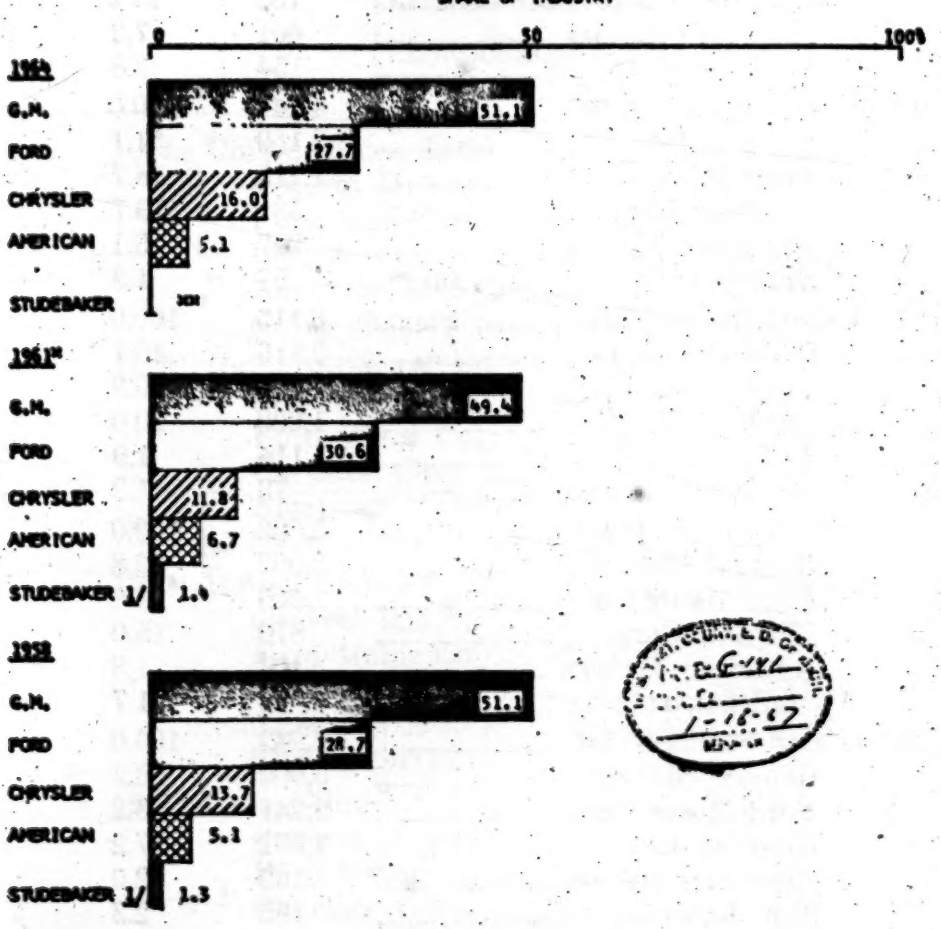
Source: STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 6, page 4.

EXHIBIT G-141

CHART 26

UNITED STATES AUTOMOTIVE INDUSTRY
1958 - 1961 - 1964

DOMESTIC AUTOMOBILE PRODUCTION
INDUSTRY COMPONENTS



*FORD AUTOLITE MERGER APRIL 12, 1961.
xxLESS THAN 0.05%.
1/ INCLUDES STUDEBAKER-PACKARD CORPORATION.

SOURCE: TABLE 25.

G-141
1-18-62

G-141
62

EXHIBIT G-142

TABLE 26

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

DOMESTIC TRUCK PRODUCTION
INDUSTRY COMPONENTS

(Thousands of Units)

		(Units**)	(Share)
1964	United States Total	1,561	100.0
	General Motors	634	40.6
	Ford Motor Co.	458	29.3
	Chrysler Corp.	136	8.7
	International Truck	167	10.7
	Mack Truck	14	0.9
	White Motor	21	1.3
	Jeep (Willys)	121	7.8
	Other	10	0.6
1963	United States Total	1,463	100.0
	General Motors	584	39.9
	Ford Motor Co.	425	29.1
	Chrysler Corp.	111	7.6
	International Truck	168	11.5
	Mack Truck	16	1.1
	White Motor	26	1.8
	Jeep (Willys)	111	7.6
	Other	22	1.5
1962	United States Total	1,254	100.0
	General Motors	487	38.8
	Ford Motor Co.	375	29.9
	Chrysler Corp.	96	7.7
	International Truck	147	11.7
	Mack Truck	14	1.1
	White Motor	24	1.9
	Jeep (Willys)	86	6.9
	Other	25	2.0

Exhibit G-142

		(Units**)	(Share)
1961*	United States Total	1,128	100.0
	General Motors	415	36.8
	Ford Motor Co.	339	30.1
	Chrysler Corp.	65	5.8
	International Truck	143	12.7
	Mack Truck	9	0.8
	White Motor	18	1.6
	Jeep (Willys)	124	11.0
	Other	15	1.3
1960	United States Total	1,198	100.0
	General Motors	495	41.3
	Ford Motor Co.	337	28.1
	Chrysler Corp.	70	5.8
	International Truck	120	10.0
	Mack Truck	14	1.2
	White Motor	16	1.3
	Jeep (Willys)	122	10.2
	Other	23	1.9
1959	United States Total	1,140	100.0
	General Motors	402	35.3
	Ford Motor Co.	347	30.4
	Chrysler Corp.	72	6.3
	International Truck	143	12.5
	Mack Truck	17	1.5
	White Motor	20	1.8
	Jeep (Willys)	115	10.1
	Other	24	2.1
1958	United States Total	871	100.0
	General Motors	340	39.0
	Ford Motor Co.	243	27.9
	Chrysler Corp.	59	6.8
	International Truck	81	9.3
	Mack Truck	14	1.6
	White Motor	17	2.0
	Jeep (Willys)	92	10.6
	Other	24	2.8

Exhibit G-142

		(Units**)	(Share)
1957	United States Total	1,090	100.0
	General Motors	421	38.6
	Ford Motor Co.	337	30.9
	Chrysler Corp.	77	7.1
	International Truck	122	11.2
	Mack Truck	17	1.6
	White Motor	17	1.6
	Jeep (Willys)	68	6.2
	Other	30	2.8
1956	United States Total	1,104	100.0
	General Motors	445	40.3
	Ford Motor Co.	297	26.9
	Chrysler Corp.	91	8.2
	International Truck	138	12.5
	Mack Truck	18	1.6
	White Motor	17	1.5
	Jeep (Willys)	66	6.0
	Other	32	2.9
1955	United States Total	1,246	100.0
	General Motors	498	40.0
	Ford Motor Co.	374	30.0
	Chrysler Corp.	96	7.7
	International Truck	130	10.4
	Mack Truck	15	1.2
	White Motor	17	1.4
	Jeep (Willys)	79	6.3
	Other	38	3.0

NOTE: Detail may not add to totals due to rounding. Percentages may not add to 100.0% due to rounding.

* Ford Autolite merger April 12, 1961.

** Includes Buses.

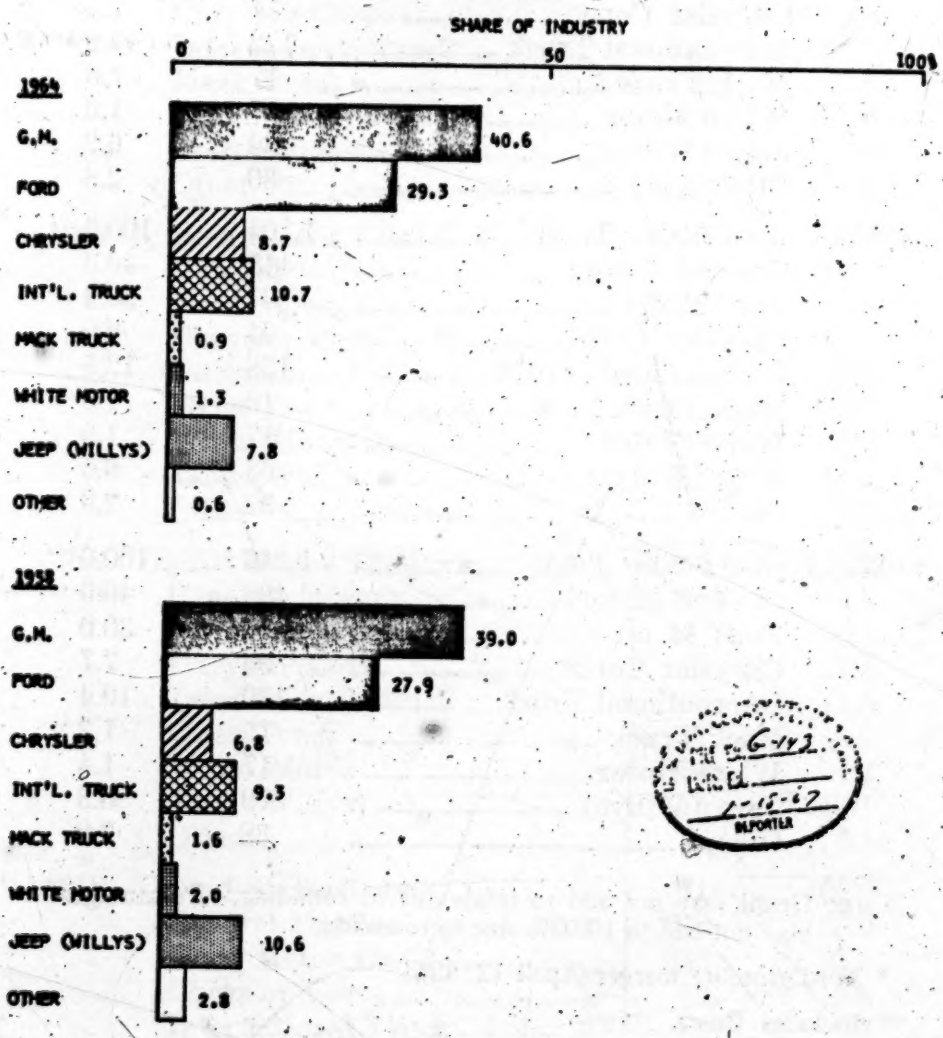
Source: Ward's 1965 Automotive Yearbook, pages 78 and 79.

EXHIBIT G-143

CHART 27

UNITED STATES AUTOMOTIVE INDUSTRY
1958 - 1964

DOMESTIC TRUCK PRODUCTION
INDUSTRY COMPONENTS



SOURCE: TABLE 26.

Mar. G-143
Identified
4-15-67
REPORTER

G143
62.

EXHIBIT G-144

TABLE 27

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

DOMESTIC TRACTOR PRODUCTION
INDUSTRY AND FORD COMPONENT

(Thousands of Units)

Year	United States Industry(A) (Units)	Ford(B) (Units)	Ford(B) (Share)
1964	213	26	12.2
1963	203	27	13.3
1962	169	26	15.4
1961*	157	23	14.6
1960	128	24	18.8
1959	240	46	19.2
1958	209	45	21.5
1957	202	37	18.3
1956	183	36	19.7
1955	290	61	21.0

* Ford Autolite merger April 12, 1961.

Source: (A) Ford Defendant Answer to Interrogatory No. 12.
(B) Ford Defendant Answer to Interrogatory No. 11.

EXHIBIT G-145

TABLE 28

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

TOTAL DOMESTIC FACTORY SALES

(Thousands of Units)

Year	Automobiles(A)	Trucks**(B)	Tractors(C)
1964	7,554	1,377	204
1963	7,444	1,316	205
1962	6,753	1,102	172
1961*	5,402	925	155
1960	6,530	974	132
1959	5,475	940	229
1958	4,132	696	209
1957	5,953	891	204
1956	5,623	895	191
1955	7,666	1,053	286

* Ford Autolite merger April 12, 1961.

** Includes Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 5, page 3.

(B) Ford Defendant Answer to Government Interrogatory No. 10.

(C) Ford Defendant Answer to Government Interrogatory No. 12.

EXHIBIT G-146

TABLE 29

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

TOTAL DOMESTIC VALUE OF SALES

(Thousands of Dollars)

Year	Automobiles(A)	Trucks**(B)	Tractors(C)
1964	$14,860,000	$3,241,000	$551,315
1963	14,427,077	3,076,000	517,876
1962	13,071,709	2,482,000	462,254
1961*	10,285,777	2,155,753	379,673
1960	12,164,234	2,297,549	307,785
1959	10,534,421	2,339,000	485,004
1958	8,010,366	1,730,027	443,048
1957	11,198,379	2,083,000	365,360
1956	9,754,971	2,077,432	327,060
1955	12,452,871	2,020,973	449,869

* Ford Autolite merger April 12, 1961.

** Includes Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 7, page 5.

(B) Ward's 1965 Automotive Yearbook, page 65.

(C) United States Department of Commerce, Bureau of Census, Current Industrial Reports, Tractors (Except Garden Tractor) Summary for 1964 Series M35S (64)13 For release 5-27-65, page 2. Wheel Tractors and M35S(63)13 For release 6-5-64, page 2 Wheel Tractors.

EXHIBIT G-147

TABLE 30

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

DOMESTIC FACTORY SALES
FORD'S OPERATION

(Thousands of Units)

Year	Automobiles(A) (Units)	Automobiles(A) (Share)	Trucks(B) (Units)	Trucks(B) (Share) (1)	Tractors(C) (Units)	Tractors(C) (Share)
1964	2,089	27.7	415	30.1	24	11.8
1963	1,924	25.8	393	29.9	26	12.7
1962	1,890	28.0	344	31.2	27	15.7
1961*	1,653	30.6	296	32.0	23	14.8
1960	1,855	28.4	300	30.8	26	19.7
1959	1,714	31.3	300	31.9	43	18.8
1958	1,194	28.9	206	29.6	45	21.5
1957	1,846	31.0	293	32.9	42	20.6
1956	1,629	29.0	249	27.8	34	17.8
1955	2,181	28.5	331	31.4	59	20.6

* Ford Autolite merger April 12, 1961.

(1) Ford's Truck Share of Industry Trucks and Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 8, page 6.

(B) Ford Defendant Answer to Government Interrogatory No. 9.

(C) Ford Defendant Answer to Government Interrogatory No. 11.

EXHIBIT G-148

TABLE 31

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

DOMESTIC VALUE OF SALES
FORD'S OPERATIONS
(Thousands of Dollars)

Year	Automobiles(A) (Dollars)	Automobiles(A) (Share)	Trucks(B) (Dollars)	Trucks(B) (Share(1))	Tractors(C) (Dollars)	Tractors(C) (Share)
1964	$4,745,587	31.9	$886,984	27.4	$61,042	11.1
1963	4,275,982	29.6	824,932	26.8	56,454	10.9
1962	4,145,359	31.7	711,925	28.7	53,658	11.6
1961*	3,553,574	34.5	593,500	27.5	50,381	13.3
1960	3,841,915	31.6	592,451	25.8	48,492	15.8
1959	3,827,084	36.3	606,554	25.9	82,062	16.9
1958	2,612,846	32.6	412,599	23.8	76,223	17.2
1957	3,909,307	34.9	545,089	26.2	63,140	17.3
1956	3,211,064	32.9	461,286	22.2	46,740	14.3
1955	4,094,248	32.9	524,242	25.9	78,479	17.4

* Ford Autolite merger April 12, 1961.

(1) Ford's truck shares of Industry Trucks and Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 8, page 6.

(B) Ford Defendant Answer to Government Interrogatory No. 9.

(C) Ford Defendant Answer to Government Interrogatory No. 11.

EXHIBIT G-149

TABLE 32

UNITED STATES AUTOMOTIVE INDUSTRY
1959-1964

EXPORTS OF AUTOMOBILES AND TRUCKS
(Thousands of Units)

Year	Automobiles(A)		Trucks**(B)	
	(Units)	(Share)	(Units)	(Share)
1964	198	2.6	163	10.4
1963	194	2.5	146	10.0
1962	180	2.6	138	11.1
1961*	140	2.5	209	18.5
1960	145	2.2	216	18.1
1959	117	2.1	195	17.2

NOTE: Percent share based on Total U.S. Factory Sales.

* Ford Autolite merger April 12, 1961.

** Includes Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 10, page 7.

(B) Ward's 1965 Automotive Yearbook, page 81.

EXHIBIT G-150

TABLE 33

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

TOTAL UNITED STATES FACTORY SALES INCLUDING EXPORTS
(Thousands of Units)

Year	Automobiles(A)	Trucks**(B)
1964	7,752	1,561
1963	7,638	1,463
1962	6,933	1,240
1961*	5,543	1,131
1960	6,675	1,194
1959	5,591	1,137
1958	4,258	877
1957	6,113	1,107
1956	5,816	1,104
1955	7,920	1,249

* Ford Autolite merger April 12, 1961.

** Includes Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 5, page 3 (Includes Exports).

(B) Ward's 1965 Automotive Yearbook, page 75 for 1964 and page 65 for prior years.

EXHIBIT G-151

TABLE 34

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

TOTAL VALUE OF UNITED STATES FACTORY SALES INCLUDING EXPORTS
(Thousands of Dollars)

Year	Automobiles(A)	Trucks**(B)
1964	$14,860,000	$3,241,000
1963	14,427,077	3,076,000
1962	13,071,709	2,482,000
1961*	10,285,777	2,155,753
1960	12,164,234	2,297,549
1959	10,534,421	2,339,000
1958	8,010,366	1,730,027
1957	11,198,379	2,083,000
1956	9,754,971	2,077,432
1955	12,452,871	2,020,973

* Ford Autolite merger April 12, 1961.

** Includes Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 7, page 5.

(B) Ward's 1965 Automotive Yearbook page 65.

EXHIBIT G-152

TABLE 35

UNITED STATES AUTOMOTIVE INDUSTRY
1956-1964

IMPORTS OF AUTOMOBILES AND TRUCKS
(Thousands of Units)

Year	Automobiles(A) (Units)	Automobiles(A) Share of Total U.S. Factory Sales	Trucks**(B) (Units)	Trucks**(B) Share of Total U.S. Factory Sales
1964	516	6.7	16	1.0
1963	409	5.4	18	1.2
1962	375	5.4	12	1.0
1961*	279	5.0	9	0.8
1960	444	6.7	24	2.0
1959	668	11.9	23	2.0
1958	431	10.1	15	1.7
1957	259	4.2	8	0.7
1956	108	1.9	3	0.3

* Ford Autolite merger April 12, 1961.

** Includes Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 9, page 7.

(B) Ward's 1965 Automotive Yearbook, page 80.

EXHIBIT G-153

TABLE 36

UNITED STATES AUTOMOTIVE INDUSTRY
1956-1964

VALUE OF UNITED STATES IMPORTS OF AUTOMOBILES AND TRUCKS
(Thousands of Dollars)

Year	Automobiles(A)		Trucks**(B)	
	Value	Share of Total U.S. Factory Sales	Value	Share of Total U.S. Factory Sales
1964	$547,047	3.7	$15,146	0.5
1963	445,054	3.1	18,524	0.6
1962	421,505	3.2	14,221	0.6
1961*	306,565	3.0	12,020	0.6
1960	513,010	4.2	28,207	1.2
1959	734,917	7.0	25,666	1.1
1958	486,839	6.1	17,825	1.0
1957	301,286	2.7	9,836	0.5
1956	126,530	1.3	3,624	0.2

* Ford Autolite merger April 12, 1961.

** Includes Buses.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, paragraph 9, page 7.

(B) Ward's 1965 Automotive Yearbook, page 80.

EXHIBIT G-157

TABLE 39

UNITED STATES AUTOMOTIVE INDUSTRY
1955-1964

ORIGINAL EQUIPMENT SPARK PLUGS FOR AUTOMOBILE AND FORD SEGMENT

Year	Industry Automobiles(A) (Units)	OE Spark Plugs For Automobiles(B) (Units)	OE Spark Plugs Installed In Ford Automobiles(C) (Units)	Ford Share (Percent)
1964	7,554,105	57,099,000	16,065,000	28.1
1963	7,443,522	55,568,000	14,663,000	26.4
1962	6,753,134	49,365,000	13,978,000	28.3
1961*	5,402,415	38,272,000	11,797,000	30.8
1960	6,529,926	47,944,000	13,123,000	27.4
1959	5,474,723	41,393,000	13,091,000	31.6
1958	4,131,978	31,737,000	9,190,000	29.0
1957	5,952,712	46,808,000	14,639,000	31.3
1956	5,623,401	44,117,000	13,014,000	29.5
1955	7,665,797	60,138,000	17,490,000	29.1

* Ford Autolite merger April 12, 1961.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, Domestic Sales, paragraph 5, page 3.

(B) STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 49, page 27.

(C) STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 64, page 37.

EXHIBIT G-158

TABLE 40

UNITED STATES AUTOMOTIVE INDUSTRY
1958-1961-1964

ORIGINAL EQUIPMENT SPARK PLUG INSTALLATION
CAPTIVE** SEGMENT OF THE AUTOMOBILE INDUSTRY

Year	Industry Automobiles(A) (Units)	OE Spark Plugs For Automobiles(B) (Units)	OE Spark Plugs Captively Supplied** (Units)	Share Captively Supplied (Percent)
1964	7,554,105	57,099,000	Total 47,903,500	83.9
			GM 31,838,500(C)	
			Ford 16,065,000(D)	
1961*	5,402,415	38,272,000	Total 26,394,780	69.0
			GM 19,052,780(C)	
			Ford 7,342,000(E)	
1958	4,131,978	31,737,000	Total 16,220,366	51.1
			GM 16,220,366(C)	
			Ford None	

* Ford Autolite merger April 12, 1961.

** Produced by Automobile Manufacturers.

Source: (A) STIPULATION OF FACTS PERTAINING TO THE AUTOMOBILE INDUSTRY, Domestic Sales, paragraph 5, page 3.

(B) STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 49, page 27.

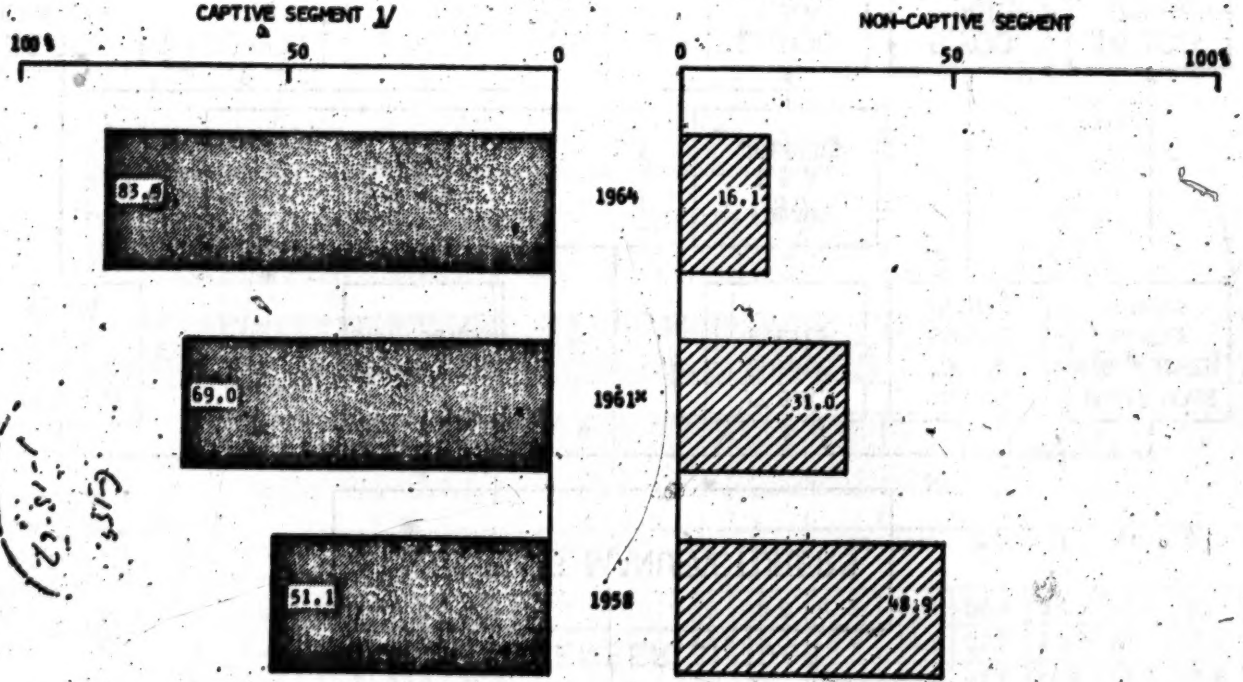
(C) Ward's Automotive Yearbook, 1966, page 35; 1962, p. 37 and 1959, p. 39.

(D) STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 64, page 37.

(E) STIPULATION OF FACTS PERTAINING TO SPARK PLUGS, paragraph 59, page 34.

CHART 29
UNITED STATES AUTOMOTIVE INDUSTRY
1958 - 1961 - 1964

ORIGINAL EQUIPMENT SPARK PLUG INSTALLATION
CAPTIVE AND NON-CAPTIVE SEGMENTS OF THE AUTOMOBILE INDUSTRY



* FORD AUTOLITE MERGER APRIL 12, 1961.
1/ PRODUCED BY AUTOMOBILE MANUFACTURERS.

SOURCE: TABLE 40

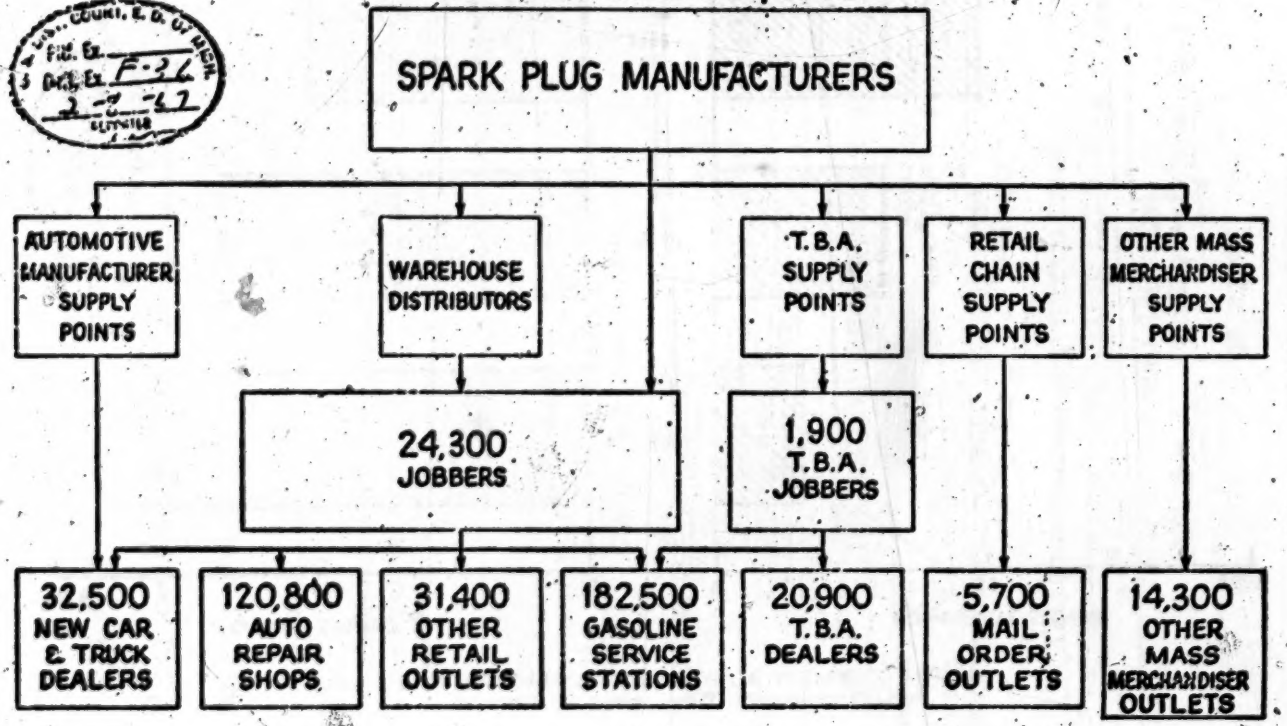
EXHIBIT G-159

4638

SPARK PLUG DISTRIBUTION SYSTEMS

AS OF DECEMBER 31, 1966

Fed. Ex. F-36
Def. Ex.
2-9-67



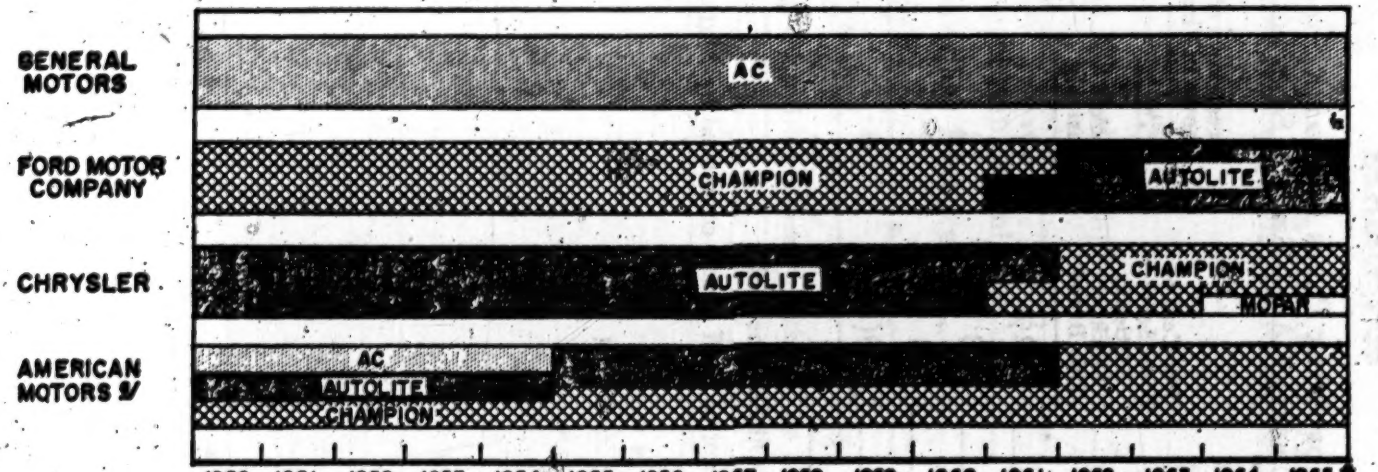
DOMESTIC AUTOMOBILES

BRANDING OF ORIGINAL EQUIPMENT

SPARK PLUGS

1950 - 1965 MODEL YEARS

DIST. COURT, E. D. OF MICH.
Pltf. Ex.
Def'l Ex. F-37
DATE 2-8-67
REPORTER



PERCENTAGE OF CALENDAR YEAR REGISTRATIONS

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965*
AC	48.5	46.1	44.4	46.7	51.6	51.2	51.7	46.5	50.5	46.9	47.3	49.8	54.6	53.8	52.3	53.4
AUTOLITE	19.8	24.1	25.2	23.0	14.0	17.9	16.7	19.9	17.4	16.0	18.6	24.5	27.7	26.3	27.7	27.2
CHAMPION	31.7	29.8	30.4	30.3	34.4	30.9	31.6	33.6	32.1	37.1	34.1	25.7	17.7	19.9	16.4	15.5
MOPAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.6	3.9

* BASED ON INDUSTRY 1965 PRODUCTION DATA

SOURCE: R.L. POLK REGISTRATION DATA

1/ INCLUDES STUDEBAKER, PACKARD, ETC. WHERE APPLICABLE

EXHIBIT F-37

465a

EXHIBIT F-38

Brands of Spark Plugs Regularly Stocked by Metropolitan Area Service Stations—1966

Brand Carried	Per Cent of Total Service Stations Stocking This Brand	Breakdown of Per Cent Shown in First Column	
		Stocked Exclusively	Stock In Combination With Other Brands
Champion	73%	17%	56%
AC	73	13	60
Autolite	41	2	39
Atlas	10(a)	6	4
Other Brands	1	—	1

(a) In Standard Oil Stations Only.

Source: Ford Central Staff Study conducted by Market Facts, Inc.

EXHIBIT F-39

BRANDS OF SPARK PLUGS STOCKED IN THOSE SERVICE STATIONS STOCKING THE AUTOLITE SPARK PLUG

Brands	% of all Service Stations Stocking Autolite
Autolite plus AC and Champion Only	72%
Autolite plus AC Only	15%
Autolite plus Champion Only	5%
Autolite plus Other Brand(s)	4%
Autolite Only	4%
Total	100%

SOURCE: Ford Central Staff Study conducted by Market Facts, Inc.

EXHIBIT F-57

ESTIMATED SHARE OF DOMESTIC INDUSTRY
SPARK PLUG PRODUCTION BY BRAND NAME—1966

Brand Name	Original Equipment Installations(a)		Replacement Sales(b)		Total Sales	
	Millions Of Units	% of Total	Millions Of Units	% of Total	Millions Of Units	% of Total
Original Equipment Producers						
AC	39.9	46.9%	205.0	41.0%	244.9	41.9%
Champion	18.3	21.5	176.2	35.2	194.5	33.2
Autolite	23.6	27.8	80.0	16.0	103.6	17.7
Total OE Brands	81.8	96.2%	461.2	92.2%	543.0	92.8%
Other Manufacturers' Brands						
Prestolite	0.3	0.4%	6.0	1.2%	6.3	1.1%
Bowers	0	0	2.0	0.4	2.0	0.4
All Other	0	0	5.5	1.1	5.5	0.9
Total Other Manufacturers' Brands	0.3	0.4%	13.5	2.7%	13.8	2.4%
Private Brands(c)						
Atlas (Standard Oil)	0	0	7.0	1.4%	7.0	1.2%
Allstate (Sears)	0	0	6.0	1.2	6.0	1.0
Riverside (Wards)	0	0	3.0	0.6	3.0	0.5
MoPar (Chrysler)	2.9	3.4%	4.8	1.0	7.7	1.3
All Other	0	0	4.5	0.9	4.5	0.8
Total Private Brand	2.9	3.4%	25.3	5.1%	28.2	4.8%
Total	85.0	100.0%	500.0	100.0%	585.0	100.0%

(a) Estimated based on 1966 new vehicle production data.

(b) Based on survey of the Hunter Publications Micro-Market Panel of Retail Outlets conducted by Conway-Milliken Co. in May, 1966.

(c) Private brand sales estimated by Ford.

F-58
7A/69

A COMPARISON OF AUTOLITE'S ORIGINAL EQUIPMENT INSTALLATION REPLACEMENT AND ORIGINALLY EQUIPPED U.I.O SHARES 1955-1974

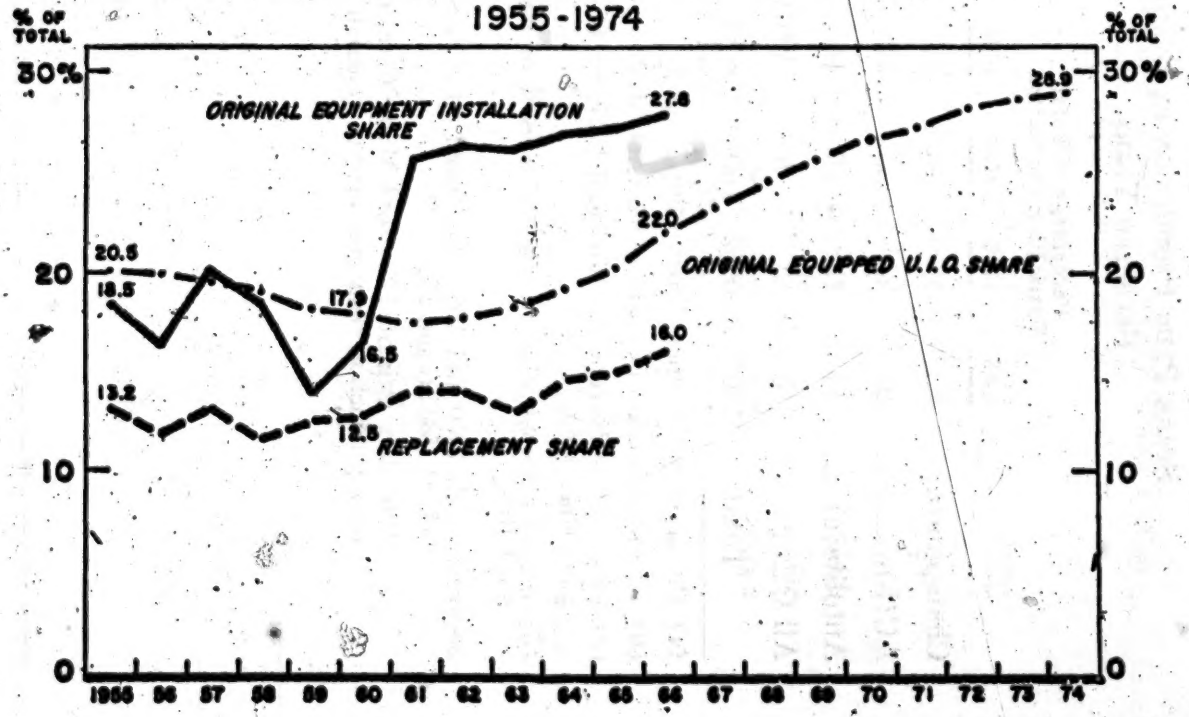


EXHIBIT F-58

469a

EXHIBIT F-60

SPARK PLUG PRODUCTION BY BRAND
SELECTED YEARS

	Percentage of Total Spark Plug Production				Percentage Point Change 1955-1966
	1955	1960	1964	1966	
Champion(a)	53%	48%	40%	33%	(20) pts.
AC(b)	28	34	39	42	14
Autolite(c)	14	13	16	18	4
All Other	5	5	5	7(d)	2
Total	100%	100%	100%	100%	0 pts.

(a) Produced by Champion Spark Plug Company.

(b) Produced by AC Division of General Motors.

(c) Produced by Electric Autolite until 1961; by Ford Motor Company since 1961.

(d) Includes Mopar which accounts for most of the increase from 1964-1966.

Sources: 1955, 1960 and 1964 data based on S.P. Stip., Paras. 46, 48, 51, 54, 56 and 59.

1966 data estimated by Ford Motor Company based on its own production data and market research survey results.

EXHIBIT F-61

REPLACEMENT SALES OF AUTOLITE SPARK PLUGS
(Millions of Units)

Prior to Acquisition	Original Equipment Replacements	All Other Replacements	Total
1956	22.3	15.3	37.6
1957	25.8	17.5	43.3
1958	22.3	15.3	37.6
1959	26.3	18.2	44.5
1960	25.2	17.2	42.4
Subtotal	121.9	83.5	205.4
Percent of Total	59%	41%	
Following Acquisition			
1961(a)	20.9	29.3	50.2
1962	32.9	28.8	61.7(b)
1963	37.5	22.5	60.0(b)
1964	47.2	21.7	68.9(b)
1965	51.5	22.5	74.0
Subtotal	190.0	124.8	314.8
Percent of Total	60%	40%	
Total 10 Years			
Millions	310.9	209.3	520.2
Percent of Total	60%	40%	100%
Memo: Last 2 Years	98.7	44.2	149.9
Percent of Total	69%	31%	

(a) Electric Autolite and Ford Combined.

(b) Includes purchases of Autolite brand replacement plugs by Ford from Eltra.

Source: Total replacements from S. P. Stip., Paras. 59, 60, and 61. Breakout of original equipment replacements from detailed part number sales analysis performed by Ford.

EXHIBIT F-70

CONFIDENTIAL

FORD MOTOR COMPANY
Intra-Company Communication

July 10, 1959

To: Mr. T. O. Yntema
Mr. A. R. Miller

Subject: Preliminary Findings of the Special Studies Group—O'Leary Corporation [During discussions prior to the acquisition The Electric Autolite Company was sometimes referred to as O'Leary Corporation or Mars Corporation.]

The Special Studies Group was formed on May 27, 1959 to locate and to investigate potential investment opportunities for the Ford Motor Company. Members of the Group are:

J. B. Abbink	A. F. LaBarge
C. E. Beck (Chairman)	J. E. Lundy
V. H. Condon (Secretary)	J. M. McBride
R. L. Johnson	H. P. Welch

The work of the Group so far has been directed mainly to an investigation of companies in the automotive parts manufacturing field. This field was selected for initial review because the Company currently is faced with major problems related to (1) inadequate production and distribution of service parts and (2) excess capacity and unprofitable manufacturing operations, principally in the Hardware and Accessories Division. (A special study is now under way to determine what steps should be taken to improve the profitability of the Sandusky, Rawsonville and Ypsilanti plants.)

Exhibit F-70

To date, the manufacturing divisions have not been particularly successful either in producing low-volume service parts or in selling production parts outside the Company. Neither has the Company participated satisfactorily in the independent replacement parts market, which has been growing rapidly at the expense of dealer outlets. The Ford Division recently was given approval to market non-FoMoCo brand parts through independent distribution channels. Progress to date indicates that it will be very difficult for the Division to develop volume sales of new brands in this competitive field with no established distributor organization and with a severely limited line of products to sell. The acquisition of a company with (1) know-how in the production of low-volume service parts, (2) established brand names, and (3) a successful distribution organization could contribute materially to the solution of both the Hardware and Accessories and the overall replacement market problems.

The auto parts field was selected for initial investigation also because it is closely related to the Company's present business and management skills, yet would provide an earnings base not affected by the severe cyclical swings of car sales. Furthermore, this is a field in which opportunities exist for Ford to increase the profit potential of a company it acquires. This feature is likely to be a major consideration in the selection of a possible acquisition in most fields. It is probable that the Company will have to pay a substantial premium over the current market value of the firm it decides to purchase. In order to obtain a satisfactory return on its investment, therefore, Ford must be in a position to contribute something to the company acquired—in the form of sales volume, management, capital, or something else—that will substantially increase its earnings potential.

Exhibit F-70

During the past month, the Special Studies Group has considered more than ninety auto equipment manufacturers and has reviewed in some detail the recent financial data for about fifty of these. This review included the major manufacturers of (1) electrical parts; (2) hardware; (3) engine parts; (4) wheels, brakes, and friction products; (5) bearings; (6) chassis parts; (7) seat frames and springs; (8) glass; and (9) rubber products. The results of this review are summarized in Exhibit A. The Group concluded that, from the standpoint of broad participation in the service parts market, the most attractive companies for initial consideration were the electrical and hardware manufacturers. Manufacturers of bearings, rubber products and some specialized parts warrant consideration in the future. Glass, the most profitable segment of the industry, probably is not a fertile field for acquisition because of anti-trust problems, but increased participation in this business by means other than acquisition is now being considered. The Group eliminated from further consideration at this time companies that are principally suppliers of major components for original equipment installation.

O'Leary Corporation

The review of electrical and hardware manufacturers yielded one company that appears to be an outstanding candidate for acquisition by Ford. This company (hereinafter called O'Leary Corporation) has an established brand name applicable to a variety of parts, and a nationwide distribution organization selling over 400 different products in the service market. As shown in Exhibit A, the stock is one of the more attractively priced issues in the field. It is selling at 10 times 1957 earnings and at 7/10

times book value, compared, for example, with Champion Spark Plug, 19 times earnings and 4.4 times book value, and Electric Storage Battery, 13 times earnings and 1 times book value. Furthermore, the company's products and customers are such that Ford probably could make a substantial contribution to its sales volume and profit potential.

At present, O'Leary is undergoing a substantial change in management. The profit improvement that should result will not be reflected fully for at least several months. Also, the pending loss of about $20 million of Chrysler business within the next year has received widespread publicity (Chrysler is integrating 5 major items previously purchased from O'Leary). The combination of the two factors probably has held down the price of the stock.

The Special Studies Group has completed a preliminary investigation of the O'Leary Corporation. The Group's findings, based on the information gathered to date, are summarized in the paragraphs that follow.

Pro-Forma Investment and Return

	Amount (Millions)
Estimated Ford Investment	$ 56.5
Pro-Forma Profits (1957-58 Average):	
Before Taxes	$ 20.7
After Taxes	9.6
Pro-Forma Return on Estimated Investment:	
Before Taxes	36.6%
After Taxes	17.0

The Ford investment required to purchase the O'Leary Corporation is estimated at $56.5 million. As shown in

Exhibit B, this estimate is based on the acquisition of O'Leary common stock at a 25% premium over its July 1, 1959 market price, less cash in excess of 6% of sales and less the value of Crane Company common stock held by O'Leary. (This stock was tendered by O'Leary on July 2.) No allowance has been made for funds realized from the possible sale of several of the company's older plants.

On a pro-forma basis, O'Leary's average 1957-1958 profits are estimated at $20.7 million before taxes and $9.6 million after taxes. These profits would provide a pre-tax return of 36.6% on the estimated Ford investment. As shown in Exhibit C, the calculation of pro-forma profits gives effect to (1) the elimination of non-recurring income and income from investments; (2) the loss of Chrysler volume expected in 1961; (3) the purchase from O'Leary of Ford requirements for batteries, spark plugs and several other electrical items now purchased from other sources; and (4) an estimate of possible O'Leary sales in the service market of products now manufactured by Ford manufacturing divisions. These estimates represent the combined best judgment of Group members as to sourcing possibilities and profit margins. Some of the estimated profit increments may prove impractical or may require additional investment because of facilities limitations; others may be possible that are not listed. These data can be estimated rather closely when it is possible to obtain information directly from O'Leary.

Additional information is included in Exhibit D, Summary of Financial Data, and Exhibit E, Income Statements and Balance Sheets.

Advantages of O'Leary as an Acquisition

The Group believes acquisition of O'Leary Corporation could contribute materially to the solution of the Com-

pany's problems in the service parts field. Specifically, O'Leary would provide:

1. *Batteries and Spark Plugs:* Although the company is not the sales leader for either of these products, its line is well-known and widely distributed. As shown in Exhibit F, batteries and spark plugs are among the highest-volume items handled by independent parts distributors.

2. *Other Electrical Parts:* O'Leary manufactures and sells in the service-parts market the following electrical items:

Generators and parts	Windshield wiper motors and other small motors
Starters and parts	Lamps
Voltage Regulators	Speedometers
Ignition coils	Other Instruments
Switches and relays	
Condensers	

3. *Other Parts:* O'Leary manufactures speedometer cables, oil filters and fuel pumps for which there is high service demand. In addition the company manufactures several parts now purchased by Ford from other vendors, including wiring harnesses, speedometer cables, low-volume bumpers, and distributor point sets.

4. *Brand Name:* The O'Leary brand name is well-known and has been identified with a wide range of different products sold in the service market. This brand name could be applied to a variety of products now manufactured by Ford plants for sale through independent parts distribution channels. Some of these parts are:

Electrical items (above)	Shock absorbers
Carburetors and parts	Universal joints
Master brake cylinder	Water pumps
Oil pumps	

Exhibit F-70

5. *Basis for Further Acquisitions:* O'Leary is sufficiently large to absorb other companies manufacturing products that are important in the service field. By this means Ford could obtain representation in most major areas of the service market and the O'Leary brand name and distribution organization could be more fully utilized or expanded. The products in this category might include:

   Air cleaners, oil filters (Fram, Purolator)
   Piston rings (Perfect Circle, Muskegon, McQuay-Norris)
   Brake linings and parts (Raybestos-Manhattan)
   Mechanical rubber products—hoses, belts, etc. (Dayton, Gates)
   Valves and other service engine parts (McQuay-Norris)

Facilities Acquired

The facilities Ford would acquire from O'Leary are listed in Exhibit G and described briefly as follows:

1. *Electrical parts:* The company owns three plants in Toledo, one in Syracuse, New York, and one in Sarnia, Ontario. Two of the Toledo plants are old, one is quite new and has substantial unutilized space. Under Ford ownership, all production might be concentrated in the new plant.

2. *Wire and cable:* The company owns plants in Port Huron, Michigan and Hazelton, Pennsylvania. We do not know what these plants are like.

3. *Spark Plugs:* The plant is in Fostoria, Ohio; Mr. Beck and Mr. Randall have scheduled a visit to this plant in July.

Exhibit F-70

4. *Batteries:* The battery plants are located in East Point, Georgia; Oklahoma City, Oklahoma; Oakland, California; Owosso, Michigan and Vincennes, Indiana.

Distribution Organization

At present, O'Leary Corporation has a total of about 400 employes in the sales organization. Of this total, about 300 are involved in replacement sales and 100 in original equipment sales. The sales organization consists of nine original sales offices, each of which handles both original equipment and replacement market sales. The company sells to some 66 distributors who sell in turn to jobbers, oil companies, tire companies, and in some cases, to large retailers.

The quality of the company's distribution organization is a key factor to be considered in a decision to acquire O'Leary. We believe that this factor can be evaluated by means of distributor interviews and a jobber survey.

Management

For the 20 years preceding 1954, the company is reported to have been essentially a one-man operation, under Royce G. Martin. Since Martin's death in 1954, the company has undergone a series of organization changes. In 1955, G. W. Wattles began acquiring O'Leary stock through Mergenthaler Linotype Company. In 1956, C. R. Feldman, an associate of Wattles, moved onto the O'Leary board, and in 1957 Wattles became Chairman of the Board.

During this period, the company set up its present decentralized group organization, bringing men in from the outside for the most part, to head the groups. Lawrence Garber, Vice President and General Manager of the Battery Group was formerly Vice President—Manufacturing for H. K. Porter; J. J. Bohmrich, Electrical Products

Exhibit F-70

Group, was Vice President and Assistant to the President of Fruehauf; Robert Twills, Ceramics Group, was formerly manager of one of the company's spark plug plants; Robert Volk, General Products Group, was a works manager at National Supply Company. Research is headed by G. E. Spaulding, formerly the company's chief ignition engineer. The latest changes were announced early in June this year. R. H. Stroh, formerly Vice President and Automotive Sales Manager for Holley Carburetor, was appointed Vice President and Director of Sales. R. H. Davies, formerly Vice President and General Manager of the Industrial Truck Division of Clark Equipment, was named President of O'Leary Corporation.

Ownership-Availability for Sale

The O'Leary Corporation is controlled by Gurdon B. Wattles through his control of Mergenthaler Linotype, owner of about 19% of the O'Leary Common Stock. Mr. Wattles' interests are described in Exhibit H. We do not know whether Mr. Wattles would be interested in selling O'Leary, but it could be easier to deal with one man than with the management of a widely-held corporation.

RECOMMENDATION

The Special Studies Group believes that the O'Leary Corporation is sufficiently promising as a Ford acquisition to warrant further investigation. This investigation should answer the following principal questions:

1. How good is the distribution organization?
2. What products could the company supply to Ford; what are the profits of these?

Exhibit F-70

3. What is the sales volume and profit on each major item sold in the replacement field?
4. What Ford products could the company sell in the service market?
5. How good are the company's facilities; what could Ford do with them?
6. Would the acquisition result in serious industrial relations problems?

The Group believes that adequate answers to these questions cannot be obtained without requesting information from O'Leary and thereby disclosing the reason for our interest. It is the recommendation of the Group, therefore, that its preliminary findings be presented to Mr. Ford and Mr. Breech with the suggestion that, if they concur, arrangements be made to approach Mr. Wattles on a preliminary basis.

C. E. Beck
Chairman

EXHIBIT F-73

O'Leary Corporation Field Trip—6-13-59

J. F. Randall and C. E. Beck

[During discussions prior to the acquisition The Electric Autolite Company was sometimes referred to as O'Leary Corporation or Mars Corporation.]

At the O'Leary Corporation main offices, we met with the following people:

Mr. J. P. Falvey	Chairman of the Board
Mr. R. H. Davies	President
Mr. E. R. Stroh	Vice President, Sales
Mr. J. J. Bohmrich	Group Vice President, Electrical Products Group
Mr. G. E. Spaulding	Director of Research and Development
Mr. Elgin Brooks	General Manager, Toledo Plant
Mr. R. H. Bayer	Controller
Various Department Heads	

Mr. Falvey, who has been with O'Leary Corporation since 1934, was the only member of the group of long-term employment with the company. Mr. Falvey started as an attorney in the Patent Department, was made President in 1954 and recently elevated to Chairman of the Board.

Mr. Davies has been with O'Leary about one month. Previously, he was Vice President and General Manager of the Industrial Truck Division, Clark Equipment Company.

Mr. E. R. Stroh also has been with the company about one month; he was previously Vice President and Automotive Sales Manager for Holley Carburetor.

Mr. J. J. Bohmrich has been with O'Leary approximately fifteen months. Previously, he was Vice President of Fruehauf Trailer.

Exhibit F-73

Mr. Spaulding has been with O'Leary since 1948. Prior to his present assignment, he was Chief Ignition Engineer.

Management

It was obvious that the company is continuing to undergo substantial changes in management, products, facilities, etc. as the result of the overall change in top management initiated after the death of Mr. Royce G. Martin in 1954. It is our guess that Mr. Falvey is gradually being eased out of the picture. He is a quiet, unassuming person. In our discussions, he indicated a reasonably comprehensive knowledge of the overall business, but we doubt that he has the drive necessary to revitalize the organization. To date, neither Davies nor Stroh have been on the job long enough to evaluate their performance. Both appear to be aggressive, capable men in their early 40's. Our impression of Mr. Bohmrich was that he is a very capable executive. In our opinion, his knowledge and aggressive attitude toward the business was rather outstanding. In our discussions with him, he went through the reorganization accomplished to date, including profit performance, labor problems, etc., of the Electrical Products Group. From the data he discussed with us, it was quite apparent that under the new leadership, the Electrical Products Group has improved its performance importantly. Mr. Spaulding appeared to be a typical research-type engineer.

Products and Distribution

At present, O'Leary Corporation has a total of about 400 employees in the sales orgnization. Of this total, approximately 300 are involved in replacement and after-market sales and 100 in O.E.M. The sales organization consists of 9 regional sales offices. Each office includes representatives

handling both O.E.M. and the replacement market. Mr. Stroh indicated that at present the company has 66 distributors throughout the country handling replacement sales. These distributors, in turn, sell to jobbers, oil companies, tire companies, and, in some cases, directly to large retailers.

Mr. Stroh estimated present replacement sales at $60-$70 million (total sales, $160 million). He also indicated that this was by far the most profitable end of the business. O'Leary now has sales of about $60 million to Chrysler; about one-half represents sales of starters, generators, regulators and coils planned for manufacture by Chrysler by the 1961 model. The balance of sales—$30-$40 million, are with American Motors, Studebaker-Packard, outboard motor manufacturers, the government, etc.

In the case of spark plugs, he stated that the cost of manufacturing spark plugs was approximately 17¢. The units are sold to O.E.M. for 6¢ and to the after-market distributors at 38¢. Mr. Stroh mentioned that the entire sales organization was being realigned with a great deal more importance attached to both O.E.M. and after-market aspects.

Facilities

O'Leary Corporation owns approximately 1.3 million square feet of space in Toledo. These facilities house the general office, the central research and development, and all of the Electrical Products Group except for the plant in Syracuse, New York, and the Canadian subsidiary in Sarnia, Ontario. The following table summarizes the facilities in Toledo:

Exhibit F-73

	Estimated Area (Sq. Ft.)	Remarks
General Offices	60,000	3-story, old building of very little value.
Champlain Plant #1	195,000	This plant houses the equipment making starters and generators for Chrysler. 2-story building in fair condition. Most of the equipment is far less automated than Ford.
Champlain Plant #2	254,000	Multi-story, old building in crowded area; very little value. This plant houses short-run production of the 4 principal electrical parts.
Northwest Plant	455,000	New plant in excellent location; adequate acreage for expansion. Approximately 200,000 sq. ft. now in use; the balance of the building has never been used, although it was built about 4 years ago.
Research and Development Building	200,000	4-story, old building, but in good repair. Adequate for present use.
Parts Depot	140,000	Multi-story, old building, practically no value.

Except for the new Northwest Plant and the Engineering and Research Building, the balance of the facilities are worth very little. Because of the age and condition of the plants, we estimate that they are virtually written off. The manufacturing equipment, although most of it is rather old, appeared to be in good, efficient working condition. Mr. Bohmrich indicated that consideration was being given to relocating the entire operation located on Champlain Avenue to the new Northwest Plant. It is our guess that any move will be deferred until the outcome of the Chrysler problem is resolved. Incidentally, Mr. Stroh is of the opinion that O'Leary will retain some of the starter, generator, voltage regulator and ignition coil Chrysler business. We were advised, however, that Chrysler has most of the

facilities in place now and has started production of distributors. We doubt, therefore, that O'Leary will retain very much of the business. We also question O'Leary's ability to retain much of the after-market business for these four items if they are terminated by Chrysler as an O.E.M. producer.

Other facilities discussed in our conversations are summarized below:

	Estimated Area (Sq. Ft.)	Remarks
Syracuse, N. Y. Plant	200,000	This plant makes starting motors, generators, regulators and other electrical items similar to the Toledo works, but different size of products (in the case of generators, heavy-duty truck units are manufactured).
Sarnia, Ontario Plant	N.A.	This plant makes a full line of electrical products for Chrysler and Ford of Canada. Apparently, this plant was expanded about 4 or 5 years ago at the request of Chrysler and at present a substantial amount of excess space exists.
Fostoria, Ohio Spark Plug Plant	203,000	This plant houses the entire spark plug operation. From all indications, this is a profitable, well-organized business.
Sharonville, Ohio Bumper Plant	200,000	This plant manufactures Lincoln and other bumpers—typical job shop facility.
Woodstock, Illinois Die Casting Plant	200,000	This plant manufactures zinc and aluminum die castings—job shop operation.

Mr. Falvey indicated that a number of plants had been closed over the past year, including the LaCrosse, Wisconsin Instrument and Gage Plant, part of the Sharonville Bumper Plant and the Niagara Falls and Los Angeles Battery Plants. He indicated that products located in these abandoned plants have been re-grouped and relocated in the remaining facilities.

Exhibit F-73

Engineering and Research

The Engineering and Research function of the company has been decentralized to a substantial degree to the five groups (Electrical, Battery, Spark Plug, General Manufacturing, Fabricating). The central research organization consists of approximately 200 people. The divisional organization also includes about 200, for a total of about 400 employees. We met with each of the department heads in the Research Center, and our discussions indicated that the facility is staffed with good engineers. It is quite obvious from the equipment used and the number of people involved that O'Leary stretches its research dollar as far as possible.

Electrical Products Group

The Electrical Products Group employs 3,400 employees. Of this total, 1,000 are in Syracuse, New York; the balance are in Toledo. After the contract with Chrysler terminates (end of 1960 model), we would estimate that this activity will shrink to less than 1,000 employees. As indicated previously, Mr. Bohmrich impressed us as being a very capable executive. He showed us data whereby this Group alone had reduced its annual G & A expenses by about $1 million through reorganization and elimination of certain frills acquired during the reign of Mr. Martin.

Battery Group

Mr. Falvey indicated that the battery industry, in recent years, has had excess capacity. Because of this condition, the Niagara Falls and Los Angeles Plants were closed. At present, O'Leary has plants in the following locations:

Exhibit F-73

East Point, Georgia
Oakland, California
Oklahoma City, Oklahoma
Owosso, Michigan
Vincennes, Indiana

Each of the above plants manufactures a full line of batteries for passenger cars, trucks, tractors, etc. Two or three of the plants also produce aircraft batteries. The freight cost of shipping batteries is such that it is desirable to have a number of locations. Because of the type of operation, the economy of scale in terms of plant size appears to be relatively small (100,000 to 200,000 square feet). We observed from the discussions that this is a profitable end of the business. We were also impressed with the Research and Development people in this field. This is the only group that is completely centralized. The total Research Staff consists of about 40 people.

Spark Plug Division

Although the spark plug operation consists of only one plant, it has been assigned divisional status—probably because of its profitability. In our tour of their research facility, we spent a considerable amount of time with the head of the Spark Plug Research Office. He showed us a number of advanced developments being conducted both for private industry and for the government. We estimate that about 20-30 research people are involved in this work.

General Conclusion

Except for the new Northwest Plant consisting of about 450,000 square feet, very little of the Toledo facilities would be of any value to Ford in a merger. As indicated previously, most of the facilities are very old and, presumably, the net book of the company would reflect little value for

Exhibit F-73

either the buildings or the equipment. It is conceivable that the Research Center could be maintained at least for some period of time, in that it is a well-kept, self-contained unit which seems to meet the needs of the areas covered. The Enginering and Research personnel should be a real asset. They would probably complement and greatly strengthen Hardware and Accessories Engineering.

With the decline in the electrical products business due to the termination of Chrysler business, we would estimate that the company will probably regroup its remaining facilities in one building—the new Northwest Plant. An alternative would be to transfer all electrical products operations to the Syracuse, New York Plant, which now apparently specializes in the low-volume, hard-to-make type components. Under a merger, all electrical products made at Toledo could easily be absorbed in the Hardware and Accessories Division. The Syracuse Plant could be retained as is.

From an industrial relations standpoint, it was interesting to note that all direct labor operations in the Toledo electrical group are on a piece-rate basis. From discussions with the superintendent, the general manager, and the Vice President, it became apparent that O'Leary has taken a rather aggressive position in resolving some of its industrial relations problems. Our observations also indicated that the Toledo plants employ a very high percentage of female employees. Under a merger, this piece-rate aspect could be real sticky. With the decline in Chrysler business and the closing of the Toledo works, however, the problem might evaporate.

We were invited by Messrs. Davies, Falvey and Stroh to visit any other plant we wished. As soon as possible, we plan to arrange a trip to the spark plug plant in Fostoria, Ohio, the battery plant in Owosso, the Fostoria Foundry and the Woodstock Die Casting Plant.

EXHIBIT F-82

[LETTERHEAD OF BOWERS
BATTERY AND SPARK PLUG CO.]

October 27, 1960

Mr. H. L. Kohlmeier, Purchasing Agent
Service Parts Department
Ford Division
P. O. Box 628
Dearborn, Michigan

Dear Harold:

During my discussions with you of a few weeks ago, I further related some details regarding our possibility of servicing all or a portion of your spark plug requirements under the Ford brand name.

Since talking with you, we have further expanded our facilities with some additional automatic equipment that should take our daily production to 50,000 spark plugs. We have also added a complete modern test engine so that heat ranges can be spanned out here on a day to day basis. Further, we would be more than happy to assist in any program that you folks may elect to put into being.

Our Atlas program, by the way, is gaining momentum by leaps and bounds and we have already shipped more than 3½ million plugs, with a potential of about 5 million a year from this source.

In the event that you elect to go into a test program, we would be more than happy to develop the display package, shipping carton and all pertinent details to a program that you may have in mind. It would not be necessary for you to commit for a quantity of spark plugs. We would sit down with you folks and work out the packaging detail, then go from there on a no commitment basis (as to quanti-

Exhibit F-82

ties). As mentioned to you, our packaged price would be at 26½¢ per spark plug, net tax included, f. o. b. destination, 1,000 spark plugs or more.

We have recently developed a new red marking for the Atlas spark plug. I will send you a set for your perusal under separate cover.

Thanks again for your many kindnesses. I enjoyed my discussions with your Mr. Beck, Mr. McFall and Mr. Desmarais. Will be looking forward to seeing you in the next couple of weeks, and will be in touch beforehand to set a suitable time for you.

With kind regards,

Bowers Battery And Spark Plug Co.
H. J. Noznesky
President

HJN: gem

EXHIBIT F-83

[LETTERHEAD OF
GENERAL BATTERY AND CERAMIC CORP.]

Mr. H. L. Kohlmeier
Purchasing Agent
Service Parts Department
Ford Division
P. O. Box 628
Dearborn, Michigan

Dear Mr. Kohlmeier:

It has been some months since our conversations in Detroit; however, we are continuing to progress with our spark plug division. Perhaps we can get our costs down and at this writing it looks very promising.

I am going to plan to get to Detroit very shortly. Will call you ahead of my arrival so that you may have some free time and we can discuss the spark plug future at some length.

We are striving to come up with a $.21 price.

I hope you are in good health and will be looking forward to seeing you in the very near future.

Kind regards,

GENERAL BATTERY AND CERAMIC CORP.
(Formerly, Bowers Battery & Spark Plug Co.)
H. J. NOZNESKY
President

HJN: jr

EXHIBIT F-85

[COPY]

December 19, 1960

Ford Motor Company
Central Office Building
Michigan & Southfield Roads
Dearborn, Michigan

Att: Mr. L. H. Hyde
General Purchasing Agent

Dear Mr. Hyde:

I want to thank you again for the courtesies which you have shown me during my visit to your office last week and in accordance with your request am pleased to confirm our quotation for spark plugs for service requirements as follows:

Based upon standard spark plug types as required for your various engine models and in quantities of 100,000 to 200,000 per month

a) delivered freight prepaid to eastern points—vicinity Boston, Mass., New York, N. Y., Philadelphia, Pa., and possibly Richmond, Va.—with plugs packed by us in cartons imprinted to your specifications and with your plates . . $26.50 per C

b) delivered freight prepaid to vicinity Detroit, packed in bulk only, ... $26.30 per C.

These prices do not include Federal Excise Tax which will be shown as a separate and additional item.

I am taking the liberty of attaching herewith copy of our booklet "Spark Plugs for Motor Vehicle Engines", form VDT-UBE 140/3, which you may find interesting. We

Exhibit F-85

should also be glad to furnish promptly any sample or test spark plugs which you may wish to have or any additional information which you may require.

In reference to the question of alternators please be advised that we are already in touch with the factory in Stuttgart on this matter and hope to have definite advice before long.

Permit me to again assure you of our sincere desire to cooperate with you in every way possible.

We hope that we may have the privilege to serve you and remain

Very sincerely yours,

ROBERT BOSCH CORPORATION

W. BOEDECKER
Vice President

S-WB/ch

Opinion of the District Court on the Merits

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF MICHIGAN

SOUTHERN DIVISION

Civil Action No. 21911

UNITED STATES OF AMERICA,

Plaintiff,

—v.—

FORD MOTOR COMPANY and THE ELECTRIC AUTOLITE COMPANY,

Defendants.

OPINION

FREEMAN, Chief Judge.

This is a Government divestiture action under Clayton Act, § 7, as amended, 15 U. S. C. § 18, challenging the 1961 purchase, for 28 million dollars, of select assets of Electric Autolite Company by Ford Motor Company, the nation's second-largest producer of mechanized vehicles, with annual sales then exceeding two million units and resources approaching four billion dollars.[1]

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[1] Clayton Act, § 7, as amended, 15 U. S. C. § 18 provides in pertinent part:

"No corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no corporation subject to the jurisdiction of the Federal Trade

The automotive machine is a complex assembly of hundreds of parts. This litigation revolves around a comparative handful: the battery, spark plugs, and a group of possibly less-familiar items, together with their components, in the electrical system—the starter, voltage regulator, ignition coil, generator (or alternator) and distributor. Like all of its competitors, principally General Motors, Chrysler and the much smaller American Motors, Ford has never manufactured everything which has gone into its cars, trucks and farm tractors.[2] In the mid-1950's, most of these enumerated elements were among those which it purchased from outsiders. While buying rather than making can be economical in some instances in any industry, Ford management, faced with excess plant capacity and ample capital reserves, was beginning to have serious doubts about the breadth of its extra-organizational procurement policy. Contributing to the misgivings was an obvious shift in the service habits of the car-owning public. The more than 9,000 Ford franchise vehicle dealers throughout the country, among whom there existed a strong propensity to obtain materials for repairs through the defendant's[3] wholesaling divisions feeding the aftermarket

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Commission shall acquire the whole or any part of the assets of another corporation engaged also in commerce, where in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."

[2] Except where otherwise noted, this decision deals only with United States producers, plants, markets and operations. All industry and similar percentages are taken in reference to a base of 100, exclusive of the influence of imports.

[3] Electric Autolite Company, now known as ELTRA corporation, was joined as a defendant on the theory that if a violation of Section 7 is proven, the Government may be entitled to force it to take

(replacement-parts trade), were losing maintenance business to gasoline filling stations and engine specialty shops which found it more convenient to get supplies from nearby non-Ford affiliated distributors.[4] Although this trend was irreversible, Ford felt that it could make the most of a bad situation if it could obtain a manufacturer's profit on as much of the merchandise as possible moving through these so-called independent middlemen.[5] Thus, one goal was for it to build more components for its own automobile population. Furthermore, for reasons detailed hereafter, in order to secure stocking rights for some Ford-application parts at the retail level, it seemed wise to also offer a variety of electrical articles for at least Chrysler and General Motors models.

The Electric Autolite Company was founded in 1922 to assume the Electric Auto-Lite Division of Willys Corporation; it has been a leader in automotive lighting and ignition apparatus ever since. In 1934, it merged with Moto Meter Gage and Equipment Corporation, the President of

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back the assets it sold to Ford. ELTRA's motion for release from the litigation, made at the outset of the trial, has been taken under advisement. For purposes of this opinion, the word "defendant" refers to Ford only.

[4] A survey conducted for Ford in 1960 indicated that the volume of all servicing done by franchise automobile dealers dropped to 16% from 28% in 1952 while the share attributable to filling stations increased from 34% to 47%. The licensees' portion of minor mechanical repair work, the type most likely to call for replacement of many of the components discussed in the text, dropped during the eight-year period from 39% to 24%. Almost all of this difference was absorbed by retail gasoline outlets.

[5] Although the term "independent" is used to designate replacement-market wholesalers and retailers other than Ford franchise dealers, it should not be taken to signify that the latter are under an obligation of any kind to purchase any replacement parts from defendant if the items are available elsewhere.

which, Royce Martin, chiefly on the basis of personal contacts, succeeded in drawing to the firm the bulk of Chrysler's electrical needs. Autolite's history is a story of expansion, contraction and diversification according to the latter's demands. For example, spark-plug fabrication was commenced at its specific request. During most of the two decades after the Moto Meter acquisition, Chrysler was the primary outlet for Autolite plugs and batteries, together with, among additional components, instruments, die castings, cable and fractional-horsepower motors. While American Motors and, in the truck and tractor field, International Harvester Corporation and others did deal with Autolite, Chrysler was truly its *raison d'etre.*[6]

The scene changed drastically upon Mr. Martin's death in 1955. The subsequent year Chrysler ordered a significant share of its batteries from Autolite's rivals, which by 1960 were furnishing more than two thirds of its requirements. In 1957, the word went out that Chrysler intended to integrate construction of distributors, generators, starters and voltage regulators—all of which previously had been gotten from Autolite.[7] This upheaval, along with several other disturbing considerations, led Autolite to foresee the possibility that it might 'shortly be left with a fixed-volume spark-plug plant but without a customer big enough to warrant the output; for, of the two major users besides Chrysler, General Motors made its own and Ford had been buying exclusively from another source for half

[6] American Motors Corporation is the result of the 1954 merger between two automobile manufacturers, Nash-Kelvinator Corporation and Hudson Motor Company. Textual references to AMC relate, where appropriate, to one or both of its predecessors.

[7] By 1960, Electric Autolite's sales of automotive parts to Chrysler had declined from a 1957 level of $142.6 million to $57.7 million.

a century. The brand name "Autolite," which had been raised to prominence by a multi-million-dollar investment in advertising, was also a subject of much anxiety. Due to the peculiarities of the industry, it could become nearly worthless for spark plugs if the company lost the Chrysler entree. Moreover, that portion of the aftermarket accustomed to the label on most of the items definitely being phased out at Chrysler carried them because of their original-equipment status which was then fast disappearing.

Around the beginning of 1960, Autolite sent a task force of salesmen to Ford in a concerted effort to convince defendant to take on at least some "Autolite" plugs. Ford had a better idea; it would relieve Autolite of the potential albatross of a factory. After arduous negotiations, the agreement precipitating this lawsuit was signed, pursuant to which Ford received the plug facility at Fostoria, Ohio, together with the "Autolite" trade name, one of six operating battery installations, at Owosso, Michigan, the services of a few personnel, and limited distribution rights.[8] Within a few months, Electric Autolite was again turning out spark plugs on a small scale, having continued uninterrupted manufacture of batteries and a host of other electrical elements.[9] At the same time it started publicizing, although not with the vigor which had attended the promotion of

[8] Electric Autolite had been anxious to rid itself of several plants making other types of electrical parts; however, Ford declined to purchase them both because they were older than the factories it acquired and because for some time they had been centers of labor unrest.

[9] It did cease manufacture of certain items, *e.g.*, bumpers, always of marginal profitability at best and totally uneconomical when Chrysler, for which they had been produced largely as a goodwill gesture, stopped buying many more lucrative components.

"Autolite," another mark, "Prestolite," previously seen only on batteries in isolated regions but now destined to appear on its full automotive line across the nation. However, the emphasis shifted to the private-label accounts, including, in a few instances, Chrysler, Ford and General Motors, which prefer the goods under their own insignia. Finally, it widened its base by venturing into new areas and, upon its merger in 1963 into Mergenthaler Linotype Company to form a combination with a 200 million dollar asset value, became known as ELTRA Corporation.[10]

Ford ended up in the position to satisfy its entire call for spark plugs internally. On the other hand, to this day it still purchases several million batteries annually; for Owosso cannot furnish enough for both new-vehicle and replacement purposes. Furthermore, defendant has gone forward under "Autolite" with a plan first implemented in 1960 for an independent-aftermarket assortment of other parts. An Autolite Division was formed to advance the cause among non-franchisee retailers and the acquired name appears frequently on Ford engines.

I

MARKETS

Almost six months to the day after the transfer had been completed, the United States filed the present complaint asserting that the effect is a probable substantial lessening of competition in four lines of commerce through-

[10] Actually, diversification became significant the year prior to the acquisition in suit when Electric Autolite took control of Hiller Aircraft Corporation, Marshalltown Manufacturing, Inc., and the Equitable Leasing Corporation. At the time of the Ford transaction, Autolite's assets totaled approximately 150 million dollars.

out the entire country. While Ford vehemently denies the likelihood of injury, it agrees that the Government has correctly described the relevant geographical territory and concedes the appropriateness of three product markets: automobiles, automotive batteries and spark plugs. With respect to the fourth, which plaintiff denominates "ignition parts," there is a dispute. In the Government's lexicon, the expression encompasses starters, generators and alternators, ignition coils, voltage regulators, distributors, and, more important, many of their members.[11] Ford holds that no "meaningful definition of . . . 'ignition parts' can be framed so as to constitute a line of commerce." This criticism is leveled for two reasons: insufficient economic identity in the industry and lack of interchangeability among the alleged constituents, that fundamental quality of any properly delineated market. *United States* v. *E. I. duPont de Nemours & Co.*, 351 U. S. 377 (1956). The evidence does demonstrate that there is little chance of substitution within this category. Each element fulfills a unique function. Generators and alternators, which convert mechanical into electrical energy, can hardly be replaced by distributors, which assign a given amount of current to a particular spark plug. Coils and regulators cannot stand

[11] An alternator is a relatively recent device which in some cars takes the place of a generator and serves the same purpose of converting mechanical into electrical energy for supply to the ignition system and for charging the battery. The regulator controls the maximum output of the generator, limits the voltage furnished to the battery and serves as a circuit breaker to prevent the battery from discharging back through the generator. The coil steps up the ignition-system voltage, which is then fed by the distributor to each spark plug at the proper time and in the correct sequence. The central item in the starter is the starting motor. It draws upon power stored in the battery to, in effect, crank the engine, which in turn is the source of mechanical energy for the generator.

in for one another nor for starters, distributors or generators. In the aftermarket, the concern here, where sales are on a finished-goods instead of production-contract basis, exchangeability within a generic type is also severely restricted. Sometimes it is a matter of performance. A six-point distributor cannot be used in an eight-cylinder motor. In other instances it is a question of size and mounting. A generator simply may not fit on a Chevrolet if it was designed for a Plymouth. Variations occur not only from vehicle manufacturer to manufacturer and year to year, but also among different contemporary vehicle styles of the same make and even between two identical models built several months apart. All in all, the variations are awesome. A fully stocked garageman bent on following Detroit's instructions to the letter would have had to have on hand in order to service Chrysler Imperials of 1957 through 1960 vintage, ten numbers of generators, seven of distributors, and four each of starting motors and regulators. The amount he would have charged for a distributor would have run from $27.45 to $34.45, with the one picked depending upon year, style, and, if he was working on a 1959 car, whether it had been rolled out early or late in that period. The obstacle in matching portions of basic units is the same. The distributor cap for most 1956 Buicks was fastened with screws inserted vertically. The succeeding year's version, half again as tall, was affixed with a horizontal clamping device. A price list of the more commonplace General Motors electrical items for 1955-64 passenger automobiles and light trucks, virtually all of GM or American Motors origin, contains approximately 800 entries. It is also true that "ignition parts" is ambiguous. To a Ford representative the term includes spark plugs and high-tension wiring. A Government witness was not even

sure that, as the United States urges, it embraces generators. Of three ignition-parts brochures in evidence, two mention plugs while the third does not. However, it displays numerous switches, *e.g.*, horn relays, not seen in the others. Of course, these discrepancies could be more accidental than substantive; groceries can comprise a market even if a few food stores in a community handle gastronomic exotica while many carry culinary utensils or children's encyclopedias. See *United States* v. *Von's Grocery Co.*, 384 U. S. 270 (1966).

Indeed, the advertising materials submitted by Ford do much to discredit its stand on both counts. They affirm what the testimonial record already shows—that there are competitive *lines* of articles for ailing engine electrical systems, which, according to their most significant function, might be called the ignition systems. Realistically, the firms behind them are best thought of as cataloguers and branders—merchandisers—rather than fabricators.[12] While many do some manufacturing, few, if any, make all they sell and most build very little. To round out their selections they deal with each other. Thus, they regularly buy from and produce for rivals with which they are locked in combat for space on the repairman's shelf. Generally, this battle is actually waged by the salesmen of non-exclusive, independent-contractor warehousers and jobbers. A decade ago merchan-

[12] More precisely, unless otherwise noted, the term "merchandiser" (and equivalents "sponsor" and "marketer") is used in Parts I and II to denote a company which publishes a catalogue under its own name to achieve with respect to at least the bulk of the electrical engine components listed therein the economic significance of a brand proprietor in many contexts. Most of the items in its brochure will carry the name appearing on the cover, although there are instances, generally involving small parts, where this may not be the case.

disers were classified according to the adaptability of their wares. The greater slice of the business had been captured by sponsors of items for only certain vehicles, the ones on which the same components under their names were original equipment. Electric Autolite, a supplier to Chrysler and American Motors, was typical of the "genuine parts" proponents.[13] The rest belonged to outfits, referred by the Establishment as "gyps" because they lacked original-equipment status, furnishing specially conceived assortments of commendable workmanship, which, through slight deviations from original specifications for the sake of increased fungibility, covered all popular machines (and, incidentally, those of any single company) with a minimum of numbers per generic type.[14] With the movement toward neighborhood gasoline stations for simpler tune-ups, by the late 1950's everyone began to strive toward the same objective: the compilation of a quality assemblage of faster-moving items, easily inventoried and used by the frequently more inexperienced serviceman engaged in predominantly light work, and suitable for the majority of the conveyances on the highway. Nevertheless, the restricted versus wide-application dichotomy endures. Traditionally, wholesalers carried narrow or all-make aggregations, but not both. Those of the former inclination composed the Automotive Electric Association, dedicated to the genuine-parts con-

[13] By 1958 there were only three major genuine-parts sponsors: Electric Autolite, General Motors and Holley Carburetor Company, the primary electrical supplier to Ford. At that time Autolite and Holley apparently manufactured everything which was sold in the aftermarket under their names.

[14] For example, one recent all-make catalogue contains only three ignition-coil numbers for all popular vehicles. To achieve the same coverage with original-equipment-type coils, an outlet would have to stock approximately a dozen numbers.

cept. An AEA adherent normally would take on nothing electrical for engines, except spark plugs and batteries, unless it had a factory-installed twin. Although this practice is breaking down, the largest segment of the AEA continues to be ruled by the authenticity notion, which also retains its attraction among most outlets. Middlemen handling the broader clusters stress convenience over ideology and score with retailers who prefer simplicity in ordering and storing. While every important merchandiser currently has an all-make line, some, chiefly Chrysler, Ford and General Motors, each now in the independent aftermarket and using its own brand on practically all original-equipment electrical engine parts even when it does not build them, are able to take advantage of the diminishing but still predominating requests for exact replicas, and, thus, have a genuine line as well.[15]

Were all the tiers of the industry composed entirely of people who felt as strongly about pedigree as the AEA once did Ford's position would approach tenability. A line of commerce is at least a recognition of competitive friction which subsides as the clamor for true copies grows. See *Brown Shoe Co.* v. *United States*, 370 U. S. 294 (1962). There would be none in regard to rarely damaged pieces of the chassis, which, when restoration is necessary, must be secured through the one foundry having the requisite dies. Similarly, it seems that complete distributors are available solely under the original label. The demand is apparently so slim that not only has no other producer found justification for tooling-up, but, more significantly, no other merchandiser has been prompted to purchase and resell them.

[15] Apparently the only merchandisers today without all-make lines sell parts for foreign vehicles and for some marine, farm-implement, truck and heavy-equipment engines.

By unqualifiedly insisting that distributors are within the relevant market, the United States fuels defendant's argument. The response to the complaint about substitutability lies outside the authentic-parts area but in the acknowledgment of the contention among all-make groups and between them and genuine components. While authentic parts are not interchangeable with each other either individually or by brand array, they are with their extended-scope counterparts; furthermore, all full-range collections are mutual alternatives. A mechanic can opt for what original-equipment-type replacements he wants and/or choose a portion or, more readily because they are condensed, all of one of the universal packages.[16]

In terms of the farthest reaches of cross-elasticity, a series of markets is under consideration, each with all-make lines and one genuine line designated by the vehicles for which it was engineered.[17] However, nothing is gained

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[16] In theory, the mechanic has additional options. For example, he could select distributor caps from one all-make line and distributor points from another. This type of buying pattern appears uncommon in practice. The record indicates that a retailer will, in all probability, deal regularly with only one wide-application array. The exceptions would come where his line does not include a particular item for which he has a call and his jobber furnishes it from another all-make array.

The extent of combining types of lines—by purchasing authentic replacements for General Motors automobiles, for instance, together with a portion of another merchandiser's wide-application assortment for use on other vehicles—is not clear. Of course, unless a serviceman limits himself to only light tune-up work, generally considered to involve little more than a change of spark plugs and adjustments (with repairs, if necessary) to the rotating parts of the distributor, he will probably have at least occasional need for components only available under the genuine label.

[17] There is another line of commerce for electrical engine parts in which the buyers are vehicle and other internal-combustion-engine manufacturers insofar as they are not integrated, *e.g.*, truck, tractor and heavy-equipment builders and light-aircraft producers.

by fragmenting the discussion in this fashion nor by proposing a procedure for calculating percentage shares.[18] In each market the multi-purpose lines are surrounded by distinguishing features. They bear a taint of illegitimacy and have particular appeal to a less skilled clientele which

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Although the Government insisted early in the trial that competition for sales to these firms was affected by the acquisition, it never took the trouble to point out how. Also included as customers in this more expansive market would be all replacement-component merchandisers insofar as they do not fabricate for themselves, to which the items they buy are akin to raw materials. Here again, plaintiff has failed to suggest wherein injury lies. See note 23 *infra*.

It should be understood that in the case of Chrysler, Ford and General Motors, genuine and all-make parts are typically of identical design insofar as they fit their own machines. These components take on their wide-application characteristics either because they are specially catalogued with fast-moving parts for other vehicles or because they make their way into the hands of members of the distribution chain who treat them in conjunction with elements under the same brand of a non-original-equipment nature.

[18] Although the markets, in order to be laid out in manageable terms, must be described by assortments, merely computing percentages of total component sales in any of them would not give a realistic appraisal of an individual competitor's share for two reasons. First, some genuine parts, of which the distributor described in the text is an example, are non-competitive, and including sales volumes on these items would distort the performances of their sponsor. For many internal purposes, Ford judges its position in the field on the basis of its performance in contact sets. Second, while an authentic aggregation is in a very real sense vying with entire all-make lines in each market, many of the constituents of the latter, designed for vehicles of different manufacture than those for which their original-equipment-type counterparts are engineered, are not effective substitutes for elements in the former, but are nevertheless obtained together with parts which are interchangeable when a purchase is on something approaching a full-line basis.

Because much of the strength of wide-application assortments lies in the convenience of the all-make concept, there may be considerable interaction among the markets. Should a customer become dissatisfied with General Motors authentic components, for instance, he is liable to discontinue carrying Chrysler and Ford original-equipment replacements also and opt for an entire wide-application array.

accepts only relatively uncomplicated maintenance assignments. They present the special problem of achieving compactness without sacrificing completeness, and, of course, travel somewhat different paths to the consumer level. Thus, it is expedient that they be placed in submarkets for weighing the probable results of the acquisition. See *Brown Shoe Co.* v. *United States, supra.* Since any undesirable consequences will show up most clearly here, the submarkets must be the foci of attention, *ibid.;* but, because the outcome will be the same whether they are viewed separately or together, they will be treated as one.

The varieties tendered under the names active in the markets and submarkets are not identical but they are certainly comparable.[19] Indeed, the fact that they differ is in

[19] The following table, based upon five all-make catalogues in evidence, shows which of the listed electrical components, although, obviously, in a few cases not parts of the engine electrical system, are merchandised through them. By way of comparison, if its sponsor has original-equipment status on the elements, an authentic-parts brochure is likely to include, besides the articles appearing below, complete distributors, new generators and starting motors, generator armatures and various additional bearings, leads, springs and pulleys. Of course, the genuine catalogue would also probably list more numbers per generic type. See note 14 *supra* and accompanying text.

Catalogues	Distributor Caps	Distributor Rotors	Distributor Points	Distributor Condensers	Distributor Bushings
United Delco	X	X	X	X	
Niehoff	X	X	X	X	X
Wagner	X	X	X	X	X
Atlas(a)	X	X	X	X	
Unico(b)	X	X	X	X	X

Catalogues	Distributor Leads	Distributor Plates	Vacuum Chambers	Ignition Cables
United Delco	X(c)		X	X
Niehoff	X	X	X	
Wagner	X		X	
Atlas				X
Unico				X

itself pro-competitive. The all-makes succeed precisely because they have been trimmed. Moreover, components can be procured by number rather than by lot. A distributor may be bought through the only catalogue in which it is pictured, while coils and regulators come from another with possibly lower prices. Among the full-utility assortments where the likelihood is greater that stocking would be on an entire-line instead of an individual basis, the disparities in offerings doubtless stem from conflicting opinions about

19[c] (cont.)

	Starting Motors	Starter Brushes	Starter Switches	Starter Bushings
United Delco	X(c)(d)	X	X	
Niehoff		X	X	X
Wagner		X	X	X
Atlas				
Unico				

	Ignition Coils	Voltage Regulators	Stop Light Switches	Ignition Switches
United Delco	X	X	X	X(c)
Niehoff	X	X	X	X
Wagner	X	X		
Atlas	X	X	X	
Unico	X	X		

	Horn Relays	Dimmer Switches	Spark Plugs
United Delco	X	X	X
Niehoff	X	X	
Wagner	X	X	
Atlas			X
Unico			X

(a)—Atlas products are carried by filling stations of the Standard Oil companies only.

(b)—Unico is a parts line specifically designed to service farm cooperatives. As in the case of Wagner, the bulk of this assortment is manufactured by ELTRA.

(c)—Primarily for cars for which the sponsor of this line, General Motors, is an original equipment supplier.

(d)—Rebuilt.

whether a given element will experience sufficiently high volume to warrant its imposition on potential customers. To find no struggle at all when some of the combatants retrench with an eye toward becoming more efficient would hardly be in keeping with the intent of Section 7. A distillation of the evidence shows that nearly every firm purporting to be in the ignition field advertises generator brushes, coils, regulators and distributor rotors, points (contact sets), caps and condensers. These are the heart of the enterprise. That uniformity is not as noticeable among the remainders of the lines is immaterial, for there is no indication that the impact of the acquisition will be milder or heavier whether the supplemental ingredients are dimmer switches and generator bushings or cable and starter motors. If anything, the inference is to the contrary. The core articles are the ones for which a garageman has the greatest need. His sourcing of the others is apt to hinge upon his satisfaction with these.

II

IGNITION PARTS

The introductory survey noted two attributes of Ford's component operations—excessive reliance upon suppliers and aftermarket participation confined to vehicle dealers—and intimated that they were leaving an adverse impression on the earnings statement. Defendant was losing a manufacturer's profit on franchisees' sales, as well as additional income on those of non-affiliated retailers responsible for an increasing proportion of the nation's automotive servicing who were not persuaded to favor Ford's wholesaling over that of an independent and often more accessible

middleman.[20] The proposals adopted for integrating production of ignition parts—a term hereafter meaning electrical engine components, except spark plugs and batteries, and, in particular, the core articles listed above—are irrelevant; growth in this regard, not yet culminated, was by internal expansion. On the other hand, the defendant's distribution endeavors on behalf of these elements are crucial.

They commenced in the Spring of 1959 when the Executive Committee approved the development of a merchandising program to be conducted through independent warehousers and jobbers on an initial Ford-population-application but eventual all-make basis and under the "Motorcraft" brand. The selection was small at first; more items were to be included from time to time. However, they were always to be only of a "competitive" type, *i.e.*, also obtainable from the "gyps" or from United Motor Service, the new wide-adaptability marketing branch of General Motors, the first assembly-line supplier to enter the multi-purpose field. This qualification together with "Motorcraft," a label different from any of those, principally "FoMoCo," which Ford would use on original equipment and put on Ford-vehicle replacements contained in the new

[20] This statement was not universally true. The franchise dealers have always acted as middlemen between Ford's wholesaling divisions and a small number of filling-station mechanics and others who would buy parts from licensees at an off-list price. In the event of such purchases, the franchisees received a redistribution rebate from the company. However, with rare exception they had no salesmen actively soliciting the business of repair outlets in their communities as did independent jobbers, which were usually large garages in an area averaging possibly only a few square miles, often able to provide round-the-clock emergency-delivery service. In addition, certain rare components were available only through someone connected with the Ford organization.

line but shipped to its franchisees, came in answer to the biggest drawback it encountered in the new undertaking. Caution was necessary to minimize the diversion of business away from these old outlets, which with dual-branding, now abandoned, would have the really genuine parts. The trade through them is more lucrative for Ford, because they buy directly from defendant without the expensive intercession of other promoters. Ford also wanted to protect the licensees' repair revenues, which, when car turnover is slow, can pay their overheads.

While Motorcraft got off the ground the performance was less than prodigious. Because it had not yet achieved all-make breadth, defendant centered its efforts within the Automotive Electric Association and by 1961 had contracted with half of the approximately 100 AEA warehousers.[21] Yet, the first year's forecasted million-dollar net gain ended up a deficit. Unlike General Motors, Ford had been unable to reach agreements with any major oil or rubber companies whereby they would push Motorcraft among their gasoline and tire customers. By 1961, Management thinking was that survival turned upon a "good" name (which should also be employed on new automobiles), coverage for non-Ford cars and trucks, and more inside construction. The evidence highlights few of the facts from which this conclusion may have been derived. Neither the view about the weight of each of these factors nor the

[21] When defendant initiated its Motorcraft program, AEA members for the first time were asked to carry genuine parts but under a name different from that which appeared on original equipment. Dissatisfaction with this arrangement was probably partially responsible for the fact that only about 50% of the AEA warehousers participated in the Motorcraft project. Since Ford made few ignition parts, they could do about as well handling replacements under defendant's suppliers' brands.

difficulty foreseen in improving "Motorcraft's" stature is disclosed. The acquisition came too quickly to permit a scientific evaluation of the success defendant would have had in following the guidelines without Autolite's help. Indeed, how well Ford is doing *with* it is purely a question of speculation.[22]

Those attorneys who have castigated the "introduce the statistics and rest" methodology which has permeated the Government's attitude in so many Section 7 cases may be startled to learn that with respect to ignition parts its presentation reveals not one meaningful figure. The record does show that "there's about 12 or 16" little corporations similar to the F & R Manufacturing Company, the Vice President of which, Vladimir Filko, was plaintiff's only industry witness. He did not relate the number of more sizeable concerns he runs across. Darkness also shrouds another consideration which heretofore has been thought germane to merger litigation—the standings, absolute and relative, of the contenders. Although the Court will thus not dwell upon such hackneyed terms as "share" and "concentration," the novelty will not provoke unbounded enthusiasm among the Bar. Plaintiff's scenario announces this as the bigness-is-badness act of the drama and at the outset warns:

> "It would be a serious oversight to attempt to analyze the probable effects of this acquisition [without appreciating that] there are smaller competitors who

[22] For what it is worth, defendant's evidence shows that whereas prior to the Autolite acquisition Ford management anticipated that pre-tax profits for the first five years on all assets purchased would aggregate $27.7 million, they actually totaled only $5.7 million. There is no breakdown of the figures by spark plugs, batteries and other parts.

> are dependent solely on the sale [of ignition parts] for their success or failure." [23]

One misconception easily drawn from this excerpt from the United States' brief and from Mr. Filko's preoccupation with the diminutive requires an immediate word of clarification. While undoubtedly some of the companies are not giants, Ford is by no stretch of the imagination a lonely bull in a china shop. Such stalwarts besides itself as Chrysler, ELTRA, General Motors, Gulf and Western Industries and the Standard Oil companies, working together through a joint subsidiary, are found in the all-make submarkets.

Boiled down to its essence, the Government's case is that the Clayton Act has been violated because, by virtue of the combination in issue, Ford augmented the Motorcraft elec-

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[23] It is this summarized position which leads the Court to conclude that plaintiff does not really believe that the acquisition injured competition in the ignition-parts market described in note 17 *supra*. It is beyond comprehension that Ford increased its stature for sales to merchandisers by obtaining a distribution network and brand name with which, as the United States views the situation, it can outde them in the retailer trade. The Government's emphasis upon the small ignition companies, the production capability of which is very limited, makes it difficult to perceive that it is concerned about purchases by original-equipment users, such as American Motors and International Harvester. These customers are obviously interested in buying from companies which manufacture and not merely merchandise some other firm's products. Furthermore, the only evidence on the subject—an isolated document called from the Ford files—shows that the original-equipment users have need for only a very few items which the little outfits discussed in this opinion even brand, let alone build. This stands to reason, for the small organizations deal mostly in *service parts* (see note 19 *supra*) for engine constituents like generators and distributors which appear on new machines as complete units. Of course, it is possible that one or more of these present-day merchandisers is a potential large-scale fabricator. However, there is absolutely no indication that any has either the capital or the inclination to risk it necessary to put it into a realistic would-be entrant classification.

trical line, is capable of providing spark plugs and batteries in conjunction with it, and has the benefit of a pre-existing distribution network and of "Autolite." However, there is not a scintilla of proof that the defendant's present ignition array, suiting all popular machines, is causally connected with the transaction. The independent-aftermarket venture was born with a multi-purpose outlook in the hope of capitalizing upon the shift of maintenance work to neighborhood shops. A full year before earnest negotiations with Electric Autolite began, the goal, to all appearances on the information then known fully attainable, had been a gradual build-up in breadth and manufacture. At no place in the hundreds of pages of documents retrieved by the United States from Ford's files was it suggested to be beyond reach unless the defendant bought a trade name or went into plugs and batteries. None of the inter-office memoranda written after April 1961 noting an addition to the catalogue hints that incorporation was prompted by the events of that month; nor does it foster the inference that sales were expected to, or actually did, hit such volume subsequent to the acquisition that tooling-up for any element only then would have been practical.[24] The over-

[24] Since they were no longer of any value to Electric Autolite, Ford also acquired the former's inventory of "Autolite"-branded electrical replacements consisting principally of elements for pre-1961 model-year Chrysler vehicles, accounting for no more than 16% of the highway population, for which Autolite had supplied original equipment. Presumably, these components did eventually become incorporated into Ford's all-make line.

While integration was heavily stressed in the planning undertaken around early 1959 and has proceeded apace for some elements for Ford automobiles, as of the time of trial the defendant was manufacturing no ignition parts not adaptable to one of its own vehicles. Thus, the all-make aspect of its aftermarket endeavors still rests largely upon outside purchases.

Although Ford's Board Chairman was advised in November, 1961 that the appropriate divisions had "completed plans for a

whelming probability is that the ignition scheme as initially designed would have come every bit as far in scope as it is today and just about as quickly.

Several people commented on the desirability of handling plugs and batteries with other products. Mr. Filko stated that the former function as a wedge for driving the latter through to warehousers; however, on cross-examination, he contradicted himself by claiming that his organization, which has neither plugs nor batteries, is advantaged by its narrower area of responsibility because it can specialize in solving ignition problems. The General Sales Manager of Champion Spark Plug Company testified that as late as 1962 he, too, favored narrow expertise but now believes that his people could use ignition parts to boost plug revenue. Nevertheless, he refused to say that Champion would take on any, although admittedly it could easily finance them.[25] The President of General Battery and

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fast-moving line of electrical and carburetion parts to cover General Motors, Ford and Chrysler vehicles," a memorandum prepared early in 1962 by the General Manager of the division responsible for marketing them suggests that no final decision had yet been made whether to brand them with "Autolite."

[25] This witness's testimony, which in greater detail is to the effect that he was uncertain of his ability to convince Champion's Board of Directors to expand into the ignition-parts field, is particularly significant. The company has the most prestigious name in spark plugs as well as the largest share of the replacement-plug market, although it has been declining rapidly since the acquisition in suit resulted in the firm's displacement as defendant's supplier. If plugs do have much of a "wedge" effect for other components, the firm's success as a sponsor of an all-make line is practically guaranteed. Its reluctance to carry an assortment cannot be ascribed to the fear that a dilution of its plug expertise among other items will drive traditional buyers to rivals, for both Ford and General Motors, which together with Champion account for 96% of the annual plug business, also sell ignition elements. Since manufacturing capacity is not essential for competitive equality in the ignition field, the investment required for Champion to enter would be minimal.

Ceramic Corporation saw merit in its practice of devoting its energy entirely to batteries and a few spark plugs. In the same vein, a spokesman for Electric Storage Battery Company told how his firm had thought about carrying a wide-application collection but decided not to. Although both proprietary- and private-label plugs and batteries are available to small merchandisers, Mr. Filko knew of only one which had seized the opportunity. As of mid-1966, no more than 15% of Ford's Autolite direct accounts stocking ignition parts also bought either of the other two types. The finding is inescapable that the three are not complementary to any significant degree. The defendant's capacity to display them together will not notably strengthen Ford's performance in any. Furthermore, under these circumstances considered in the shadow of the anti-trust prohibitions against tying, it would be unfeasible for Ford to try to overrun its parts opposition by setting its prices on batteries and plugs below the general levels—a maneuver more easily accomplished by a builder than by a mere purchaser and reseller.

Of course, since the acquisition allows Ford to use "Autolite" on different classes of goods, each is lent a hand from the presence of the same name in, and on publicity directed to, other markets. This overlapping effect evokes attention not because of defendant's wealth, for there is no indication of the extent to which it can be put at the disposal of the Autolite Division, a minor aspect of the company's total involvement, but because Ford, as anticipated, does quite well in spark plugs and can be expected to use a percentage of its return there for advertising in that area. In the interest of avoiding redundancy, this train of thought should be coupled with a study of plaintiff's lament over the very transfer of the brand.

In the early 1960's, "Autolite" was familiar; after all, it had been visible under Chrysler hoods for a quarter century. What is not clear is that any name has much intrinsic worth on ignition parts. Identification is of utmost moment, not in any usual trademark sense, but for designating authenticity. To those who stress legitimacy—and they are the majority—defendant's only real selling point is not "Autolite" but its new-vehicle status which Ford could have given any name. Thus, the thrust of plaintiff's solicitude must be toward the struggle among all-make lines. In their submarkets, recognition falls far short of being talismanic, as Electric Autolite's experience portrays. Contemporaneously with the advent of Motorcraft, it teamed up with two other original-equipment suppliers to sponsor a multi-application selection as a joint effort; their progress was not inspiring. Perhaps the Government deems it axiomatic that a well-known brand has magnetism. Logically, the converse seems closer to reality. The real ultimate consumer of ignition parts is not the same fickle housewife who shops with an eye toward compensating the detergent which entertains her with some adulterous affair on television. Although the man on the street buys them, he rarely sees them. Often he is even unaware that he needs them. He leaves his car for an overhaul or routine checkup and comes back to settle the bill. The trick is to persuade not him but the mechanic who, if not an authority, is at least a professional in things automotive, unlikely to be swayed by gimmickry. This fellow wants craftsmanship—and he should not need a trade name to discover it—with low inventories, ample profit margins, easy credit and obsolescence rebates. Therefore, it is not surprising that in the literature the emphasis is on the fewer numbers in one assortment than in another which will fit the same con-

veyances. Complimentary cabinets and racks to facilitate storage and segregation are common. Executives from the Firestone and Goodyear tire companies, deposed by defendant, failed to mention labeling as a criteria in the decision to offer their dealers United Motor Service replacements exclusively. The paramount factor to them was the series of U.M.S. training centers giving free instruction in proper motor diagnostic and treatment techniques. Refiners, to which it is imperative that filling-station operators not jeopardize gasoline business with shoddy repair work, prefer U.M.S. for the same reason. Witnesses also spoke of General Motors' parentage of 50% of the automobiles on the road and the implication that one stocking U.M.S. will be using genuine components on about half of his jobs. In 1960, Ford's salesmen called upon many rubber and petroleum firms. The summaries of these conferences passed along to defendant's higher echelons reported that the matter of branding came up with four prospects, three of which were said to have thought that "Motorcraft" was satisfactory and the fourth to have talked in the vague language of needing a name with "wide acceptance."

The preceding is the gist of the hard information bearing on customer motivation. That defendant paid for "Autolite" is wholly equivocal because the plug and battery plants could not have been secured without it. The other pertinent material is set out in Ford intra-corporate communications in the form of pure opinions that the infant Motorcraft project should have a "good" name and that modest expenditures should be budgeted to create one.[26]

[26] An estimated $176,000 was spent for advertising the Motorcraft line and name during 1960. Promotion consisted primarily of publicity in trade magazines aimed at the wholesaling segment of the market and direct mailings to jobbers, filling stations,

The authors, sometimes anonymous, did not ground their beliefs upon any actual appraisal of sales development predictable as notoriety grew. Upon these unexplained declarations the Government relies almost completely.[37] Mr. Filko was its single living exponent on the aftermath

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garages and fleets (*e.g.*, taxi and cartage companies). This small allocation for the first year of the label's existence indicates a great deal about the thinking relative to brand recognition on the part of those in a position to make controlling decisions at Ford. The proposed budget for 1961 advertising, to be carried out through basically the same media, was $208,000, with another $144,000 recommended for catalogues, price lists and monthly distributor newsletters.

By way of comparison, the following table depicts lineage purchases in trade publications for 1960 on behalf of Motorcraft and four other automotive-component, although not necessarily ignition-parts, aftermarket merchandisers:

Motorcraft (9 Months)	$161,000
Purolator	168,000
United Motor Service	233.000
Carter Carburetor	203,000
Perfect Circle	132,000

[37] In an effort to show that "Autolite" was prestigious as well as widely known, the United States points to a survey made at the request of Electric Autolite in the Fall of 1960 (shortly after the Motorcraft program had been inaugurated) among 91 "accounts" in the Chicago metropolitan area, showing that:

36.3% felt that Autolite "electrical units" were best.
20.9% felt that Delco "electrical units" were best.
3.3% felt that Ford "electrical units" were best.
12.2% felt that Autolite, Delco and Ford were equal.
18.7% felt that Autolite and Delco were equal.

It is hard to believe that the respondents who put Autolite on top were so unsophisticated as to have been oblivious to the fact six months later that their favorite items were carrying the "Prestolite" label and that the "Autolite" components were then largely the same Ford products which they had deprecated half a year earlier.

Of course, the table does not purport to reflect the influence of branding on purchasing decisions. In fact, when the poll was taken, Ford and Electric Autolite sold parts adaptable, for all practical purposes, only to Ford and Chrysler vehicles, respectively.

of the acquisition in the ignition field. Although plaintiff asserts that with the annexation of "Autolite" to Ford's other assets the "scale has been tipped decisively" against smaller competitors, he was never asked about the value of labeling. Since his direct testimony consumes a mere nine pages of the transcript, the neglect cannot be attributed to insufficient time or an unwillingness to risk confusion by probing too many topics. Shortly after this trial had been concluded, the Department of Justice told the Supreme Court in another Section 7 proceeding, where the assigned error below had been the allegedly excessive credence given by the judge to statements of company officials: "In our view, management views, at whatever level, should not be the focus of analysis." Brief for Appellant, p. 43, *United States* v. *Penn-Olin Chemical Co.*, 389 U.S. 308 (1967). Irrespective of the soundness of this anti-subjectivism under all conditions, its virtue here is manifest. The solution to the question posed by the sale of "Autolite" must turn upon empirical investigation, for, unlike the situation where the issue is a debated course of conduct as it was in *Penn-Olin*, no official's reflections could modify the economic structure. What counts is buyer sentiment and, in establishing this, the United States has been utterly deficient.

The evidence is in bad shape in another way. Since the object is popularity among garagemen who daily see defendant's engines, the odds are that Ford would have elevated "Motorcraft" quickly and quite painlessly by conferring upon it original-equipment exposure.[28] Electric

[28] The principal advantage which Ford saw in "Autolite" was the ability to use a recognized name for whatever it was worth on parts distributed through the independent aftermarket without employing the same brand on its assembly line. If it could have reduced this prospect to practice, it would have been able to give its fran-

Autolite had no full-range line of its own in 1961; thus, "Autolite" had no submarket share which it could have brought to Ford, and the take-over did not abort the defendant's potential to cut into its grasp on the trade. Electric Autolite thereafter introduced a multi-purpose package and certainly would have marked it with "Autolite" if it still owned the name. Were branding a cardinal consideration, competitors with labels of low ratings would have been up against two major hurdles where now there is one. There has been no attempt to suggest what this double handicap would have meant to them in contrast to the Ford-"Autolite" union.

The residual facet of the Government's four-pronged attack is the assumption of the Autolite distribution system. What really transpired is much less menacing than the imposing nomenclature used to describe it. Ford received six regional offices, personnel and a list of Electric Autolite's warehouses and jobbers. All of these have been and still are at liberty to deal with anyone they wish. Each old direct account had to be visited individually and, if it consented, be re-signed by defendant. Within a few months, 52 did enter into new ignition contracts. However, 50 of these for the previous year had also been involved in the Motorcraft experiment. They belonged to the Automotive Electric Association and looked upon Ford as a source of

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chise dealers (and, more significantly, its special wholesaling function to them) a limited degree of protection by making the original-equipment label, then principally "FoMoCo," available to them exclusively. See note 21 *supra*. The defendant actually tried this approach after the acquisition, but was forced to abandon it when word came from many independents that they would not carry any more Autolite Division elements than absolutely necessary if the company continued to take steps to make it more difficult for them to compete with Ford for the franchisees' business.

genuineness. By mid-1966, direct accounts totaled 156, of which 104 in 1960 had been pledged to neither Ford nor Autolite. The same block of 50 had been committed to both. The net increase traceable with any semblance of accuracy to the acquisition is two first-layer middlemen, who may or may not care about Ford's all-make assortment.[29]

A fair assessment of the evidence justifies at most the inference that Ford possibly has benefited from the Autolite bargain. Section 7 is a prophylactic where competitive harm looms reasonably probable and substantial. *Brown Shoe Co.* v. *United States, supra.* Apart from attempting to apply the likelihood and signficance tests, the Court would face a hopeless ordeal in trying to translate even certain gain to Ford into competitive injury. Although no statistics have been proffered, it is a safe bet that Ford has a large share of the market starring its original-equipment-type line, due solely to the extensive but decreasing demand for factory duplicates and the company's unique capability to meet it. Defendant's all-make success is not susceptible to an educated guess. Yet the advantages suspected by the United States to be fruits of the transaction in suit, if they exist, would be observable only in the wide-application submarkets, where the merits of branding and adjunctive products such as spark plugs and batteries would not be eclipsed by authenticity. Furthermore, unless the harm

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[29] Each of the direct accounts which is a warehouse—and most are—may have several dozen affiliated jobbers. Since the latter are free to carry so many of their warehousers' lines as they choose, there is no way of estimating with the evidence at hand the number of jobbers indirectly acquired by Ford for the first time when it re-signed the accounts mentioned in the text. Apparently, Motorcraft accounts had to be signed again by Ford to continue to handle "Autolite" parts for pre-1961 Chrysler vehicles. *Cf.* note 24 *supra.*

in the submarkets be of the requisite dimension, neither could be the effect in the markets.

The Government's working premise must be that, given any degree of advantage to defendant, sufficient competitive detriment arises from the fact that Ford is big and some of the opposition is not. Present or trending concentration —indeed, all numerical intelligence—is thus rendered superfluous. However, by adopting this stance it has forsaken recourse to many of the doctrines it previously fought to mold, such as the "ranking rules" of *United States* v. *Philadelphia Nat'l. Bank*, 374 U.S. 321 (1963) and *United States* v. *Aluminum Co. of America*, 377 U.S. 271 (1964). The alarming merger tendency rationale of *United States* v. *Von's Grocery Co., supra,* is inapposite. One is even hard-pressed to speak knowledgeably about incipiency, although he could conjecture. He might start with the simplistic supposition that size always harbingers an inordinate command. Even the United States senses the inherent unreliability of this thesis when it doubts, albeit without foundation in the record, that defendant could not have averted the collapse of Motorcraft had it not been for outside aid. He could postulate dominance on Ford's car population, which, according to the testimony, influences some all-make clientele. This approach would close the gap left by the Government's reluctance to disclose how similarly endowed firms, like General Motors here, are doing, and, therefore, must be rejected. Perhaps the most tolerable course, although not to the Court, would be to devise some theory about the inexorableness of historical patterns to prophesy from Ford's participation in the vehicle oligopoly that it is destined to repeat this achievement with full-coverage ignition parts.

III

BATTERIES

Besides the fact that the relevant technology is widely known and unprotected by patents, automotive batteries have little in common with either spark plugs or ignition parts. Manufacturing facilities can be operated efficiently on a very small scale and their outputs are highly fungible. No component must be designed to exacting tolerances. The only problem in matching a storage battery to an engine is size, and a line of five sizes will satisfy every application. For this reason, there is no overt tendency for a replacement to follow the vehicle maker's choice of brand. The article is heavy and bulky, and in order to avoid prohibitive freight penalties, the nationally oriented producers have plants around the country. On the other hand, because low-volume construction is profitable, some 150 companies compete in regional markets, often as geographically confined as west central Florida or New York City. Service-battery purchasing, occurring at least thrice during the lifetime of the average car, is frequently a spur-of-the-moment affair, immediately preceded by that sinking feeling associated with a driver's impotence at the starter, and is accomplished through the nearest retailer—usually a filling station—on the basis of whatever name happens to be in stock. In instances attended by less urgency a buyer may visit a mass merchandiser dealing over-the-counter under it own trademark, which is invariably able to give the best price. Since labeling is of negligible import under emergency circumstances and outlets of this kind often patronized under others, a large amount of a typical major battery builder's business is for private-brand accounts,

which, overall, consume 55% of production. In addition to such famous chains as Sears, Roebuck and Montgomery Ward, many oil companies fall into this category along with localized and coast-to-coast groups of department, hardware, cut-rate, tune-up, and tire and accessories stores. Joining them at a fast pace have been non-integrated vehicle firms, notably American Motors and Chrysler, for both installation and wholesaling to franchise dealers.[30]

Fabricators derive approximately the same net revenue per item whether they sell to these quantity customers or through their own efforts, including distribution expenses in the aftermarket. Among them five were responsible for more than 80% of the domestic shipments between 1955 and 1960: Electric Autolite, Electric Storage Battery, General Motors, Globe Union and Gould National. While all maintained proprietary insignia, those of the first three—"Autolite," "Willard" and "Exide," and "Delco," respectively—were the most popular. At the end of this period, Autolite was functioning with six well-dispersed factories, of which all but Owosso now belong to ELTRA; a seventh had been decommissioned in recognition of traditionally static demand and the 25% overcapacity problem felt by an

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[30] Sales of replacement batteries through franchise automobile dealers are not great, totaling, according to one reliable survey, only 6% of the aftermarket in 1964. These outlets are often not the most accessible in times of urgency and their prices are higher than those of many competitors. In the early 1960's Ford's wholesale charge to its franchisees was higher than Sears, Roebuck's retail list. General Motors does not even supply its licensees directly but leaves them to procure their requirements through the same independent warehousers and jobbers serving gasoline stations and garages. Furthermore, many franchisee battery sales are not even made in competition with other outlets. See note 38 *infra*.

industry generally thought, nevertheless, to be in a good health.[21]

Due to the essentially standardized nature of the commodity and its perennial adaptability without modification to Detroit's specifications, original-equipment-sourcing habits have not been as fixed in this area as elsewhere. Of course, General Motors' needs have long been met internally. Since the mid-1930's Chrysler relied principally, and on occasion entirely, upon Autolite, but this practice changed drastically in 1956 when it began to turn chiefly to Gould National. Ford regularly called upon several if not all of the Big Five except General Motors in a single year. This practice has continued despite the acquisition, for, in rough terms, Owosso's maximum annual capability is about 2.3 million units, or less than the 2.6 million cars, trucks and tractors with an average of one battery each rolled out by defendant in 1964.[22] At the same time the independent aftermarket swallowed in excess of 1.3 million, and the special franchisee channels more than 0.5 million elements bearing Ford's "Autolite" label. Consequently, three years after the transaction defendant's outside sourcing missed

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[21] A firm surveying the battery industry from the standpoint of possible entry about the time of the acquisition in suit would not have found dynamism its most appealing characteristic:

Year	Total Domestic Shipments
1955	35.94 Mil. Units
1956	32.76
1957	33.93
1958	31.15
1959	35.14
1960	34.92
1961	35.69

[22] Heavy diesel equipment generally leaves the factory with two batteries.

its 1960 total of better than 2.6 million by only about 160,000.[33]

While foreclosure of Ford as a customer, which the Government urges is of considerably greater significance than these computations suggest, is one of the allegations in the complaint, attention should first be directed to the horizontal aspects of the 1961 agreement. Previously, defendant had not been a battery manufacturer; thus, the takeover of the Michigan plant did not give rise to the implications accompanying the classic merger between direct competitors.[34] Illegality cannot be gauged by merely adding shares or figuring the rise in concentration in the line of commerce. A more extensive review must be embarked upon to determine what potential Ford had for becoming a producer without assistance from Autolite and what deleterious result the acquisition may have had in light of a possibility of growth in this alternative manner.

Plaintiff begins, and so might the Court, with a look at defendant's 1960 financial picture, showing assets surpassing three and three-quarters billion dollars and net yearly sales of more than five billion. However, if resources alone were the key, Ford, which in the contemporary era has always stood near the very top of the list of America's foremost industrial corporations, would have to be considered a likely entrant into practically any field. While the evidence lacks a precise indication of the degree to which the firm's holdings could have been dedicated to or hypothecated for any new venture, it does prove that Ford was seri-

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[33] Ford's vehicle production and "Autolite" replacement sales do not precisely equal the total of defendant's battery output and purchases because of inventory carryovers.

[34] Actually, Ford manufactured its own batteries from 1920 through 1927.

ously exploring opportunities for automotive and allied expansion as well as for diversification. From this activity and the enterprises under examination, the inference is plain that defendant could have borne the relatively small outlay and obtained the little expertise necessary to commence a battery operation. Ford's main line of endeavor did foster a special interest in batteries, yet it could have conveniently supplied itself but still have avoided what for present purposes is the really meaningful risk of seeking the favor of other, smaller buyers less able to ward off the evils of insufficient competition.[35] Only one preliminary study was made—in 1960—and the ensuing revelations about prospective profitability were highly discouraging and depicted Ford as a potential contender in a most remote sense. In the face of defendant's target of 15% net after-tax return on new investments, this estimate pegged earnings at 5.5% of capital employed. Furthermore, the dismal projection, formulated with a multi-plant network in mind, was contingent upon a 10% penetration of the market over and above in-house and franchisee requirements. Apparently the only option to a full national undertaking contemplated was a single-facility program to furnish about a third of the assembly-line quota; this was calculated to pay back 3.1%. These forecasts, not dependent for their pessimism upon temporary conditions or severe startup

[35] Another consideration diminishing the importance of Ford's battery requirements in assessing its standing as a potential competitor is the fact that it would have been a relatively simple matter for fabricators to keep car and truck builders happy and still act in a very anti-competitive fashion throughout most of the market. Excluding General Motors production for use on its own assembly lines, original-equipment battery purchases in 1960 amounted to about 18% of total industry shipments. Of course, the price charged for them may have been quite independent of that for service units.

costs, came at a time when Electric Autolite, through both proprietary and private labels, commanded slightly under 10% of the replacement custom. Ford had no peculiar advantage suggesting a likelihood that a one-tenth goal was easily attainable. Although "Delco" is the leader in the aftermarket, this achievement seems generally unrelated to its new-car association at General Motors; "Autolite's" share there was in the proximity of 4% in 1959 and 1960 just as it was being disengaged at Chrysler, which, incidently, did not include batteries among the electrical items it was integrating. Requests for original-equipment replicas as such have been miniscule.[38] Defendant's factory-installed brands in the late 1950's, *e.g.*, "ThunderPower," available exclusively through its dealers, serviced a mere 6% of the Ford vehicles on the road. "Exide" and "Willard," handled by many types of retailers but having virtually no background of new-automobile affiliation, ran fractions of a point behind "Autolite" in a 1964 survey. In short, Ford's reaching 10% meant, in all probability, that it would have to secure much private-name business, just as every maker except General Motors with anything approaching an impressive standing has done. For this

[38] The Government is intrigued by decals which have been placed on Ford engine blocks since the acquisition, reminding owners to use only genuine "Autolite" replacement parts. In determining whether original-equipment status has any real significance in promoting replacement-battery sales, this Court would prefer to look at more unequivocal evidence, such as the fact that some 12% fewer direct accounts are stocking "Autolite" batteries today than were carrying them shortly after the acquisition. In the case of spark plugs, where there is a definite acknowledged tendency for service items to follow by brand their initially installed counterparts, "Autolite" has experienced a gain in such accounts since 1961 of 50%, inferentially in recognition of its appearance on many more new vehicles now than when it was affiliated with Chrysler.

struggle defendant was particularly unsuited because many of the private accounts are rivals in car, truck and tractor construction.

These considerations demonstrate primarily that Ford was far from the brink of expanding internally and, secondarily, that its potentiality may have had an imperceptible influence upon the industry as already composed, functioning at three quarters of peak load and unshielded by any significant barriers against newcomers, which, unless they had more ability than Ford seemed to, were liable to end up simply additional numbers. Thus, this case is quite distinguishable from *FTC* v. *Procter & Gamble Co.*, 386 U. S. 568 (1967), and *United States* v. *El Paso Natural Gas Co.*, 376 U. S. 651 (1964), wherein the Court noted the undeniable concern over the plans of extraordinarily competent outsiders on the part of current competitors, which presumably moderated their prices so that invasion would seem less inviting. The Government has not attemped to analyze quantitatively the effect Ford may have had nor even to establish that the ranks of conceivable entrants—and, on balance, this is all Ford was—were thin or that some of the 150 small outfits were not themselves toying with the idea of going into new territorial markets. Instead, plaintiff espouses a *per se* rule that the removal of any bystander, regardless how weak its impact, in the context of concentration is violative of Section 7. The law has not gone so far. See *United States* v. *Penn-Olin Chemical Co.*, 246 F. Supp. 917 (D. Del. 1965). Nevertheless, there is no cause to pursue this tact.

Ford did not extinguish its potential. From the standpoint of manufacture, it neither joined with nor substituted for a going company. Electric Autolite (ELTRA) was left where it had been, as the fifth-largest firm, and in possession of most of its capacity together with the money

and a base for growth as the occasion arises. For the moment anyway, it also retained performance substantially untouched, averaging 10.1% of the industry total in the period 1962-64, down only 2.8 points from the average for the years 1958-60. Defendant took the one realistic route open to it by obtaining a respected name to insure a chance of success and to make an expenditure on hardware worthwhile; however, it is far from a fully matured fabricator. Besides the half of the immediate demand which Owosso cannot satisfy, there is vast room for improvement in strategic location. Today Ford fills the bulk of the orders from warehousers and jobbers with outside purchases. It has already announced its intention of starting up a new factory in Louisiana. More are in the offing if Ford is to become an efficient countrywide force—and if defendant's potential was for only the Michigan area, it was obviously of little value.[37]

Certainly the transfer of "Autolite" did not subvert the known competitive structure. On this record defendant is powerless to do more for the name than did Electric Autolite with Chrysler exposure—about 4% of the replacement-battery total.[38] 1964 research into householder buying, which

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[37] The instant situation is comparable to that which would have existed in *FTC* v. *Procter & Gamble Co.*, 386 U. S. 568 (1967), had the geographical market under consideration there been just the entire country, as it is here by stipulation, and had Procter, the potential entrant, taken over not the largest existing concern in the household liquid-bleach industry but one or several of the 200 less formidable firms with shares averaging approximately 0.1% apiece.

[38] Defendant could sell more "Autolite" replacement batteries than did Electric Autolite just prior to the acquisition because in 1960 Chrysler was not making the brand available to franchise dealers whereas Ford is today. (On the other hand, this gain is offset partially by the loss of sales to licensees of the four firms mentioned below.) From the standpoint of the label's competitive

compiled the most authoritative comparative data, assigned it 2.3% and placed it sixth, 16.2 points behind frontrunning "Delco," in a field in which the first five labels aggregated 51.7%, but the following eight only 12.7%. Among filling stations, where a third of all sales to individuals are rung up and the brands of mass merchandisers infrequently handled, it came in eighth with 1.1%. In no class of outlet did it surpass 8%.[39] "Prestolite," the sole proprietary mark of Electric Autolite (and ELTRA) since 1961, is less fa-

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importance, any increase in this regard is negligible. First, franchisee purchases from Ford, which aggregate about 500,000 units a year, are often not redistributed in the traditional sense but are used to service trade-in automobiles before they are placed on used car-lots. Second, what orthodox retail business is done invariably reflects a demand for maintenance by Ford factory-sponsored mechanics rather than for any name. For the same reasons, even though defendant before 1961 had been supplying franchisees with batteries under its private labels, adding the penetration of these old brands to that through independent outlets gained by virtue of the acquisition of "Autolite," does not give a realistic picture of the company's new aftermarket position.

From the standpoint of original-equipment customers, most of which are in competition with defendant in the car, truck or tractor markets, "Autolite" would now be a generally undesirable brand. The four major buyers in this category dealing with Electric Autolite under this name in the pre-acquisition days—Chrysler, American Motors, International Harvester and John Deere—today use either "Prestolite" or a private label and source to manufacturers other than Ford.

[39] This survey, conducted under the auspices of "Look" Magazine and considered one of the most reliable industry indicators, is used only to show relative brand standing. It does not purport to depict the total share of any one name other than in the replacement market for family automobiles. Doubtless it covers the area in which labeling is of the most competitive significance even though it does not take account of individual sales for trucks, farm implements, marine and miscellaneous equipment and bulk purchases by trucking companies and other automotive fleets. "Autolite's" best showing (7.3%) was in sales through garages. Therefore, its stocking is probably heaviest among outlets of this type, which did 8.6% of the family business in 1964.

miliar than the one relinquished, although by 1964 it appeared on approximately 1% of all replacements and, according to the evidence, will gain in the independent aftermarket substantially as fast as any that Ford may have founded there. In the perspective of these statistics, coupled with information that one consumer in twelve specifies a name and one in a hundred is so adamant that he will refuse all others, at worst ELTRA has suffered minor harm. Detecting injury when the inquiry is framed in the appropriate language of competitive deterioration is exasperating in its futility. The emphasis today is on the private labels. As a practical matter they are never stocked side by side. Each of the prominent ones belongs to a particular chain and in large measure reflects the owner's reputation as a tire, accessories or gasoline vendor; or, in the case of "Allstate" (Sears, Roebuck) and "Riverside" (Montgomery Ward), the benefits of low distribution and pro-rated-overhead costs. Only four proprietary insignia are among the foremost thirteen according to the 1964 poll: "Delco" (18.5%), "Autolite" (2.3%), "Exide" (2.2%) and "Willard" (1.8%). Whatever bothersome bunching-up there is involves "Delco," "Allstate," "Riverside," "Wizard" (Western Auto Stores) and "Atlas" (Standard Oil), the five with the 51.7% cumulative share. Excluding this quintet, any but an ivory-tower theoretician would hesitate to proclaim the feasibility of a more diffuse consumer-goods market. For the acquisition to have noticeably jeopardized the reduction of the concentration which does exist, either of two absurd assumptions is indispensable: that Ford, if it were to make a grass-roots entry, would do better by introducing a trademark previously unheard of in the arena than it will with "Autolite," or that after years of watching "Delco" predominate, ELTRA

(Electric Autolite) will suddenly find the strength, somehow denied to defendant, to stem the tide but will falter without the old name.[40]

The nature of the distributorship assignments to Ford is described in Part II. By the Fall of 1961, 831 direct battery accounts had recontracted, although 298 of them were lost by mid-1966. Presumably, ELTRA and Ford can grant identical terms to middlemen, to which, therefore, the distinction between the two must lie in "Autolite." ELTRA has been set back insofar as it is cut off from wholesalers who are content with "Autolite" and undesirous of adding "Prestolite." Competition may have sustained a blow only if good distributors are scarce, as they seem to be, so that the unavailability of those who do not want an extra line would be an oppressive handicap *and* if defendant, were it to inaugurate a label, could be expected more readily than ELTRA to persuade those carrying "Autolite" to take on another kind as well, *e.g.*, if original-equipment identification were a significant factor in advancing sales.[41] As a conceivable entrant, Ford, by definition,

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[40] Because of the state of the evidence, it is unnecessary to consider the appropriate approach if it appeared that Ford's original-equipment affiliation or other qualities not inherent in ELTRA or associated with "Prestolite" forecast notable success in the after-market, which would have been augmented by the addition of the small consumer market loyalty tied to "Autolite."

[41] As a result of the acquisition the demand upon independent warehousers and jobbers for "Autolite" batteries could increase only if Ford franchise dealers decide to purchase from them rather than from defendant's wholesaling divisions now that the original-equipment brand, which prior to 1961 had been "ThunderPower" or a similar private label, is available through more than one channel. Even if the licensees' sourcing patterns shifted completely, the number of units involved would total only about 500,000 annually, or some 1.7% of the entire replacement market. On this record, nothing else will improve "Autolite's" appeal to middlemen.

had latent appeal to some warehouses and jobbers. Of course, ELTRA has distributors today. There is no sound basis for contrasting the sizes and expansion characteristics of the two groups, one real and the other conceptual on the evidence at hand.

The critical feature of the Government's case is "Autolite" rather than Owosso, which is so clearly inadequate to diminish any important battery potential Ford may have had. Thus, the United States must prove that defendant could have given birth to a brand, which, working in opposition to "Autolite," would probably do more good for the market than does this label juxtaposed with "Prestolite." See *United States* v. *Penn-Olin Chemical Co.*, 378 U. S. 158 (1964). Given "Autolite's" quite unspectacular pre-1961 showing, which "Prestolite" could well match in a few years, plaintiff bore an *imposing* burden from the outset. It failed formally when it could adduce no evidence that Ford has special talents conducive and adaptable to exalting trade names and to overcoming the general apathy toward them. Where abundant indications point the other way, the Court will not read into "Delco's" achievements a correlation between initially equipped vehicle population and aftermarket volume, absent testimony sufficient to weld the link. It will not latch on to Ford's wealth and surmise that therein lies the seed of brand power, when, for all that appears, ELTRA is every bit as capable of launching a massive campaign of any appropriate sort, from discounts to media publicity, if there were merit in this course despite the steady downward trend of proprietary labels and the counterbalancing emphasis on private accounts as the backbone of the battery enterprise.

Much the same understanding of the situation which undermines the United States' contention that the acquisi-

tion had adverse horizontal consequences constrains acceptance of its supplemental view that detrimental vertical effects are likely to be of enough magnitude to warrant condemning the arrangements. Because Ford is now a battery manufacturer, the Government maintains, other producers sooner or later will be denied the chance to deal with what in 1960 was one of their very best customers, actual or hopeful. Admittedly, the foreclosure so far has been *de minimis*—160,00 units in 1964 in comparison with defendant's 1960 procurements and about all that can be anticipated with Owosso's 2.3 million capacity.[42] However, in a strong economy, Ford should build at least 2.5 million vehicles annually and send 500,000 batteries to franchisee repair departments. Requirements equivalent to the sum of these last two figures are at present obtained largely from other companies but could be met internally if more plants are constructed. Thus, the problem takes on complexities not brought to the surface in the decisions relied upon by plaintiff, *e.g., United States* v. *E. I. duPont de Nemours & Co.*, 353 U. S. 586 (1957). Since Section 7 prohibits not every foreclosure but only those stemming from stock or asset transactions, the issue becomes whether the instant combination will probably spawn additional factories.

That one is already on the drawing board is suggestive of an affirmative response. While post-merger planning can-

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[42] 160,000 units computed in this manner is an easily ascertainable and substantially accurate figure for present purposes to express the extent of foreclosure as of 1964. This is true even though Ford's Detroit assembly-line requirements, which, due to the proximity of Owosso, give rise to most of the foreclosure, expanded more rapidly between 1960 and 1964 than did the aftermarket, where, because of shipping costs, defendant's participation has been largely on the basis of outside purchases even when, as in 1962, Owosso was operated below capacity.

not be determinative, the steps taken by Management here confirm the course shown by other relevant factors to be the reasonable choice of informed commercial judgment. The controlling consideration is the essence of what defendant received. Owosso does not lend itself to proliferation, having given Ford no technology or meaningful savings helpful in further integration. The relationship between it and any future facilities will be temporal rather than causal. Caution is in order lest every purchase of surplus machinery preceding greater expansion be misconstrued as the reason for the progression instead of part of a design which would have been executed as satisfactorily without assistance. "Autolite" is a different story. This name brought Ford into the independent aftermarket with an assured penetration of about 4% *ab initio*. It guaranteed goodwill with trade loyalty from the start, thereby alleviating the door-opening difficulty confronted by any new firm. Defendant took over from Electric Autolite an entire going business as surely as if the pair had merged. Although Ford subsequently has been engaged in this business, the "Autolite" independent aftermarket, on a national scale to the extent of 1.3 million batteries annually, 1.9 million of Owosso's 2.3 million units in 1964 went to Ford assembly divisions, primarily in the Detroit area. The bulk of its service volume, including that through franchisees, beyond the normal transportation range from Michigan has been obtained elsewhere with a loss to defendant of a manufacturer's profit. If it is wise to fabricate a portion of the total needs, the uncontradicted inference is that full production is even smarter over the long run where scale can be flexible and monetary outlay conservative.[43] Therefore, augmented

[43] With specific reference to ignition parts for non-Ford cars, the Director of defendant's Business Development Office at the time of

and, because of freight penalties, scattered facilities are the foreseeable eventuality. Furthermore, a fair share of the investment which was projected by the 1960 preliminary investigation into battery opportunities to earn 5.5% has already been made in the form of working capital to finance inventories and credit for current replacement sales. Therefore, the rate of return could well be improved on incremental fixed assets, estimated at a net cost of four to ten million dollars for a seven plant series depending upon the size of each. Indeed, this study suggests a much more enticing yield—now the difference between buying and making—if Ford can stay within the operating expense framework which was employed as a guideline by the author of the 1960 report. In any event, the risk in enlargement today is lower than that of *de novo* entry in 1960; the demand for the output of any new installations will be pre-established by "Autolite's" past performance as Ford property. Foreclosure is clearly in sight. It may be gradual and never become complete because some sections of the country may not support a factory. However, it appears inevitable for the majority of the almost 2.5 million units, or about 6.2% of 1964 industry shipments presently bought by defendant and, therefore, must be treated now as substantial. See *Brown Shoe Co.* v. *United States, supra.*

Defendant retorts that even if an absolute denial of access to Ford should follow in the wake of the acquisition,

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the acquisition was asked whether in his opinion it would be feasible for the company to sell items which it did not manufacture. He responded,

> "On a long-term basis the answer is absolutely 'no'. . . . I don't feel that on any kind of a terminal [extended?] basis you can ever make a profit—I don't think you could stay in business by buying and reselling. In other words, you put another step in your distribution. I don't think you can afford it." Tr. 2046, 49.

this obstruction is irrelevant unless it "affect[s] the competitive viability of the suppliers constituting the consumer alternatives in the industry." While the continuing vitality of all of Ford's old sources is undisputed, the foreclosure has not yet reached the ultimate stage. More fundamentally, "remaining vigor cannot immunize the merger if the trend . . . is toward oligopoly." *Id.* at 333. It is said that there is no illegality because no battery manufacturer has been merged from the scene to reduce any buyer's options. The harm here is less dramatic than the outright demise of a producer. The concern is evaporation of patronage, the stuff of economic life, more important to younger and smaller organizations in the guise of possible clientele than to the entrenched firms lucky enough to have dealt with Ford previously. The little but dynamic and aggressive contender may be deprived of the motivation afforded by the lure of landing a big account and, thus, of the inspirational impetus to modernization and innovation which can make it more forceful throughout the whole market. However, this is neither the time nor the place to rehash all pros and cons of vertical restraints. It suffices that the latter have been held the more compelling. *E.g., Brown Shoe Co.* v. *United States, supra.* Ford's position that invalidity does not occur apart from a "[reduction in] the number of effective consumer alternatives" neglects the fact that Section 7 talks of the lessening rather than of the decimation of competition. The statute raises questions of efficacy not susceptible of resolution by a headcount and tests the atmosphere for its benignancy toward the development of marginal and prospective entrants. Compare *Tampa Electric Co.* v. *Nashville Coal Co.*, 365 U. S. 320 (1961). Obviously, the air is fouled when a buyer like defendant vanishes, shrinking in the process the call for batteries by as much as

6%, or by a more disturbing proportion when adjusted for the longstanding loss of General Motors as an outlet. This is particularly true where the market exhibits no sign of burgeoning and where its occasional spurts in activity are typically attributable in good measure to an upswing in the fortunes of vehicle builders, chiefly Ford and General Motors. Moreover, the foreclosure impends just when General Battery and Ceramic, ranking a poor sixth in 1960, has become a countrywide fabricator, presumably heightening its appeal among purchasers with supra-regional interests.[44]

The next aspect of defendant's rebuttal protests that since now both Ford and ELTRA are formidable battery manufacturers, deconcentration has taken place through the introduction of a new consumer alternative. Given defendant's elementary explanation of Clayton Act objectives, simply the stabilization of the number of competitors, it would naturally hail the acquisition as a blessing. The practical response is that, were the proposition sound, this might be the last backward-integration case; Section 7 could be skirted by a circumspect selection of assets provided they are not crucial to the vendor's survival. Compare *United States* v. *Philadelphia Nat. Bank, supra* at 370. More important any "deconcentration" as an effect of the transaction is fictitious. To be sure, there has been better allocation since 1961, but only in a very technical sense. The 150 producers with 19.2% in 1960 did 2.5 points

[44] There is no indication in the record that it is necessary for a battery producer to have a countrywide plant network in order to secure at least a portion of a major national account. Since the product is so standardized, it can presumably be purchased by one customer from separate sources in different regions, and, indeed, appears to be in some instances. On the other hand, during the period for which information is available, Ford never bought from a sectional manufacturer.

better in 1964; but the increase was no more connected with the Owosso incident than their slip in 1962 to 18.6%. The realignment flowing from the transfer was a shift in defendant's sourcing, which remained quite constant in amount for reasons mentioned above, to Electric Autolite (ELTRA) to a greater extent than before, pursuant to a contract negotiated with this end in mind by the two parties while they were hammering out the details of the acquisition. Whereas during the 1950's five manufacturers were in command, these, plus Ford, reign today, although defendant was at the bottom of the hierarchy with 5.8 of the almost 80 percentage points accumulated by all of them in 1964, and most of the 5.8 represents defendant's new-vehicle battery use. The prescription for the industry is not simply for more members. Absolutely speaking, there are plenty already. What would help is a newcomer able to attack the leaders, and Ford seems to bring little to the task. It seems unlikely that Ford can advance "Autolite," and defendant appears to have less than average qualifications for making headway in the private-label field. If defendant continues to distribute its outside purchases as it did in 1964, the aftermath of plenary foreclosure would be the depression of fifth-place ELTRA, the overall share of which would have been 5.7% instead of 10.5% in that year but for Ford's needs. Were capacity starvation the malaise overhanging the market, ELTRA's freedom to seek out new business could be beneficial. The prevailing sickness is demand deficiency. Of course, defendant's other traditional suppliers—Electric Storage Battery, Globe Union and Gould National—would miss Ford, too, although most of their tears would have been shed in 1961 when defendant sealed the alliance with

ELTRA for requirements as well as fixtures.[45] Thus, their shares aggregating more than a third of all output would decrease slightly (even if that of General Motors, roughly double any of the other three, would be unaffected.) "Concentration" does not border on the obscene because it denotes perversity; the connotations are bad: dictation over prices, service and admissions to the industry. Therefore, gross market shares can be deceptive where they include a corporation's interdivisional dealings. The battery users who feel the results of concentration are those without their own plants. To these, complete exclusion of Ford could easily mean no change or even a rise in the combined influence of the four industry leaders: Electric Storage, General Motors, Globe and Gould. Going into 1961, defendant was purchasing at an annual rate of almost 2.3 million units for original equipment. When the acquisition in that year threatened foreclosure, the "open market"—at that time, all shipments minus those for new General Motors cars, trucks and buses—braced for a decline in this amount, or by 7.3%.[46] On the other hand, the drop

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[45] The contract, which provided that defendant would purchase from Autolite "approximately 45% of Ford's total requirements of batteries for production and service," was due to expire with the conclusion of the 1964 automotive model year. Whether it has been extended formally or informally is not shown. The statistics in evidence depicting Ford's battery sourcing by company only run through 1964, when it bought 1.84 million units from ELTRA and 630,000 from other outside producers. The Government has not attacked this agreement and it plays no part in the outcome here.

[46] Although the precise number of General Motors-produced batteries transferred to one of the company's assembly divisions in a given year is not apparent in the record, the figure can be reliably estimated by assuming that it equals the output of GM cars, trucks and buses, statistics relating to which are available, for any period. Apparently, GM was the only battery-integrated vehicle builder in 1960.

in the "open market" volume of the four attributable to a loss of Ford's assembly-line trade would have been estimated at 7.5%, and of three of them, including the first- and second-ranking firms, at only 3.2%. In brief, they were keeping their grip as a body and, in the three instances, tightening it as individuals while Electric Autolite was dividing its stake with defendant.

Unfettered backward integration should be permitted, Ford claims; for otherwise it is a pawn of its suppliers to the extent of the disparity between the cost of purely internal expansion, a route which no one disparages its right to travel, and the approach it chose in this instance. The fallacy is in the unexpressed premise which either equates Ford's best profit posture with the good of untold persons *to whom each path to production is closed* or else disregards their welfare entirely. Myopia also clouds the residual argument that the unbridaled liberty to integrate backwards is a spur to competition, except where rivals could be deprived of scarce raw materials or parts. The rationale treats Ford as an invisible competitor with outside component builders which are displaced from time to time when they cannot offer the advantages of inside fabrication. Nevertheless, low prices are not in themselves always indicative of maximum consumer protection. Compare *Utah Pie Co.* v. *Continental Baking Co.*, 386 U. S. 685 (1967). When the charge to vehicle makers for factory-installation batteries, comprising a small segment of the line of commerce, may not be keyed to the generally prevalent rate, what defendant pays is irrelevant.[47] Moreover,

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[47] See note 35 *supra*. Ford has not claimed that integration will improve battery quality, assure an otherwise dubious supply or in any way improve the firm's competitive ability in the vehicle markets.

continuing supplantation of a company with which it was dealing is not an assurance that defendant can do the job more cheaply; it could imply that the traffic in the well-integrated, triopolistic automobile market will bear Ford's inefficiency in making given elements.

IV

SPARK PLUGS

A spark plug is a composite of two electrodes encased in a steel shell overlayed for about half its length by a ceramic insulator. The pair of leads is separated at the very bottom (tip) of the device by a gap calipered in hundredths of an inch. The exterior of the shell just above the tip is threaded so that the lower portion of a plug can be screwed into each cylinder chamber of a gasoline-driven machine.[48] When the unit is properly inserted, one electrode acting as ground is in contact with the engine block while through the other runs a current from the generator, stepped up to high voltage by the ignition coil. Upon reaching the tip the electricity jumps the gap to ground and gives off a spark which fires a volatile mixture of fuel and air inside the cylinder. The combustion forces the piston downward and the attached crankshaft to turn, thus creating the mechanical energy for propelling anything from lawnmowers to powershovels, but primarily cars and trucks. Although spark plugs look fungible to the layman, in fact they are delicately engineered for specific motors with special attention devoted to operating-temperature characteristics. A plug absorbs a great deal of heat from

[48] The line of commerce as stipulated by the parties excludes spark plugs for diesel and aircraft engines.

the chamber, which must be passed to the outside at a precise rate. If dissipation is too slow, the electrodes burn out quickly, but before they do, give rise to pre-ignition, causing warping or perforation of the piston head. On the other hand, the heat cannot be released too fast, for the tip has to remain warm enough to burn off post-combustion carbon residues lest the gap become clogged and the sparking function inefficient. While the optimum temperature range of all plugs is between 700° and 1800°, maintaining this span within an engine of a particular year or style depends upon how hot it gets under varying load conditions. Hitting upon the appropriate formula of insulator ingredients, conformation, size and spacing in relation to the shell to achieve the desired spread is a matter of trial and error, requiring on the average three to six months of experimentation. If the job is to be done to the satisfaction of the vehicle builder, which, of course, approves all components it uses, the project is expedited by collaboration between the company and personnel from the original equipment source, who work together on prototype engines, frequently 12 to 18 months before they are mass-produced. Other plug makers wishing to participate in the aftermarket must do the best they can to prepare in the time they have once the motor arrives on the showroom floor. However, all active brands do appear on a full line for cars of every variety, and normally function well in all cars.

Champion Ignition Company founded the plug industry around the turn of the century. In 1909 its assets, with the exception of the "Champion" trademark, became the property of what is now General Motors Corporation and formed the basis of GM's AC Division selling under the

"AC" label. "Champion" was acquired by the ancestor of the modern Champion Spark Plug Company. For the next three decades General Motors and the Champion interests were responsible for more than 90% of all output, with two thirds of this share attributable to the latter. In 1936, having been assured that it would receive Chrysler's patronage, Electric Autolite constructed the Fostoria plant. Between 1940 and 1960 it accounted for an average of 15% of all domestic shipments, while Champion and General Motors held on to 80%.

The historical highlight of the business has been the stability of assembly-line sourcing. Besides taking care of itself, General Motors sold to Chrysler until the advent of Electric Autolite. From 1941 to 1961 Chrysler bought exclusively from this youngest member of the triumvirate. Between roughly 1910 and the transaction in suit, Ford purchased only from Champion or its predecessor. Both Chrysler and Ford used their suppliers' labels. Broadly speaking the cement solidifying these relationships was a dearth of competition. Actually, this description of the phenomenon greatly oversimplifies an understatement of reality. In order to discourage Ford from integrating, Champion in 1920 offered for factory-installation plugs the "six-cent price," profitless in the short run, which has not fluctuated a mill since. Although expenses rose in the interim, Champion was still charging $.0588 in 1960, or, by then, approximately one third the cost of manufacture. General Motors swiftly adopted a virtually identical procedure towards original-equipment customers, as did Autolite in 1936. The practice soon came to cover, as it does today, both light- and heavy-engine fabricators, and weathered a Robinson-Patman Act attack stemming from the

differential between six cents and the warehouse-distributor net for aftermarket plugs, at the time about thirty cents. See *Champion Spark Plug Company*, 50 F. T. C. 30 (1953), *Electric Auto-Lite Company*, 50 F. T. C. 73 (1953), *General Motors Corporation*, 50 F. T. C. 54 (1953).

This tremendous discount is neither altruistic nor insane. The overwhelming majority of replacement plugs are dispensed by a mechanic; the over-the-counter trade is not great. Since the fear of serious damage haunts an improper choice of service unit, he has a propensity to stick with the brand sanctioned by the builder of the motor on which he is working.[49] On the other hand, this tendency, more psychological than technically necessary, is not absolute; "Champion" long controlled half of the aftermarket while Ford had around 30% of the conveyances on the highway, and 40% of "Autolite's" volume there was for non-Chrysler applications.[50] What usually causes the breakdown is an opposing reluctance to enlarge inventories. Although a few of his customers may specify a different name, when the repairman deviates, it is generally because he does not have the most appropriate kind in stock but has another, which will almost always be one with original-equipment

[49] In support of the strength of the custom for replacements to follow original installation by brand, an executive of the Firestone Tire and Rubber Company testified that although at one time the managers of the several hundred retail outlets owned by the firm were prohibited from stocking any but the now-defunct "Firestone" label, "in most cases" they would go out specially and procure for maintenance work another name from a local distributor.

[50] Some, although not much, of the disparity between "Champion's" performance and Ford's car population stemmed from the fact that this brand had a tight hold on the original-equipment market for small-engine plugs and, consequently, was the principal label stocked by such outlets as marine dealers.

American Motors-application "Autolite" plugs comprised an insignificant portion of the brand's aftermarket volume.

ties to a very popular car. Thus, the Government concedes that American Motors, with approximately 5% of the automobile market, which uses "Champion" and until 1961 employed "Autolite" as well, is too small to "support" a label by itself. The six-cent price pays for the factory exposure felt by everyone acquainted with the business to be a vital prerequisite for a newcomer to obtain more than a minimal claim on the average of five plug changes (in sets of six or eight according to the number of cylinders) generated by each new vehicle.

Few except Electric Autolite ventured into the field after Champion and General Motors divided it. Of those which did, none ever surpassed the 2% level. Several have come and gone. Firestone Tire and Rubber Company merchandised "Firestone" replacements for 35 years before it gave up in 1964. Although it owned some 800 accessory stores and successfully wholesaled other items to more than 50,000 shops and filling stations, it could not surmount the patent discrimination against brands not blessed with Detroit's approbation. Goodyear Tire and Rubber Company quit in only three years. Globe Union, a fabricator which had barely 1% of the nation's shipments, withdrew in 1960. Apart from those with substantial new-car association, the most noteworthy emblem in the aftermarket in 1966 was "Atlas," sponsored by the Standard Oil companies, with 1.4% of all service elements. "Prestolite" and Sears, Roebuck's "Allstate," 0.2 points off this pace, were next, followed by Montgomery Ward's "Riverside" with 0.6%. Several dozen others, belonging chiefly to hardware and cut-rate chains and farm-implement firms, attained a combined total of 2.4%. Most of the manufacturing for the private labels among these marketers is done by

ELTRA and General Battery and Ceramic Corporation, the only producers of any stature at all after the Big Three.[51] Since the article is light, transportation over long distances is not a problem; and one foreign concern, Robert Bosch, GMBH, exports small quantities from Germany for American consumption with the emphasis on replacements for European automobiles.[52]

At no time within recent memory prior to 1961 was less than 96% of the country's output attributable to Champion, Electric Autolite and General Motors. This figure also very nearly equals their proprietary-brand performances. Champion's share rarely dipped below 50%, although it was on a fairly steady decline of modest annual gradation. Autolite with 15% was indubitably in a comparatively weak position. A minute percentage of retailers, the bulk of which are filling stations, garages and tune-up shops, handled "Autolite" exclusively; and too often it was the optional extra among repairmen who preferred to carry only one or two varieties.[53] Despite the disadvantages under which it labored, the plug line had been one of Electric Autolite's most rewarding. However, the mood in 1960 was not optimistic. Management was worried that Chrys-

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[51] The record mentions four or five other spark-plug producers, about which nothing is known other than that two of them apparently have their own ceramic-insulator capacity and, in 1966, their outputs aggregated about 1.2% of the nation's total.

[52] Of the 4.5 million spark plugs shipped to this country by Bosch in 1964, 55% were sold to franchise dealers selling German-made Volkswagens.

[53] According to a 1966 Ford-sponsored survey of gasoline filling stations in major metropolitan areas, only 2% of the respondents stocked "Autolite" exclusively, while the figures for "Champion" and "AC" were 17% and 13%, respectively. 72% of all metropolitan stations carrying "Autolite" did so in conjunction with *both* of these other brands.

ler's phaseout of numerous electrical items would be extended to plugs. Moreover, Champion had just become a public corporation and for the first time published a financial report which, the feeling went, probably came as a real awakening to defendant; for it showed an outstanding income derived in no mean measure from the invaluable promotion Ford had provided for 50 years. That in light of this information defendant would integrate and leave Champion desperate for Chrysler's endorsement loomed as a distinct possibility. The spark-plug goodwill, established by millions of dollars of publicity, could become quite worthless should the Chrysler affiliation be lost and, with it, practically the only motivation anyone had for keeping "Autolite" on his shelf.[54] In addition, the plug facility at Fostoria could not be run on a reduced scale; thus, unless it was to be scrapped, an original-equipment customer was

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[54] Spark-plug advertising is directed toward the general public, and, in comparison with ignition-parts promotion (see note 26 *supra*), is quite heavy. Unlike many ignition parts, spark plugs are frequently changed at mileage intervals rather than when the driver encounters some unrecognized engine difficulty. Thus, he is more likely to be aware of what is happening when a new set of plugs is installed. Furthermore, plugs are not buried deep inside the motor and, thus, are visible to backyard mechanics. Speaking on the subject of publicity, an Electric Autolite sales brochure prepared for presentation to Ford around the beginning of 1960 explained the matter this way:

> "Reliable surveys continually indicate that only a small percentage of car owners specify a brand when ordering a change in spark plugs. This fact establishes the [franchise] dealer and the service station operator as the actual consumer of spark plugs.
>
> "However, to sell these outlets, it is essential to convince dealers and owner-operators that the public will accept the brand spark plugs once installed. Accomplishing this requires considerable and effective advertising for public review as well as the merchandising of these advertisements to the trade level."

an economic *sine qua non*. When a redoubled assault failed to improve the aftermarket situation and Ford refused to dual-source to Autolite and Champion, the wiser decision seemed to be to get out while the getting was good.

Champion was victorious at Chrysler when the acquisition ousted it from Ford. Although Fostoria's successor, at Decatur, Alabama, was operational in 1962, Electric Autolite (ELTRA) never regained the account. At present ELTRA is reminiscent of the theatrical aspirant waiting in the wings for the star to break a leg, contenting himself in the meantime with bit parts. It sells to the private-brand merchandisers and distributers under "Prestolite" wherever it can, all for 1.2% of domestic shipments in 1964.[55] Because of the meager demand to date, ELTRA has not been justified in baking insulators internally; instead, it gets these most sophisticated plug components from Ford. However, its current dibilitation is not to suggest that ELTRA is beyond redemption. Clearly, it has an aggressive spark-plug organization with respected expertise. Ceramic capability is easily within reach whenever revenue warrants the expenditure.[56] Yet, even though

[55] Actually, ELTRA's share of 1964 production was 1.6%. The difference between this figure and that in the text is attributable to 2.2 million plugs manufactured under the "Autolite" brand for Ford pursuant to an agreement whereby the defendant was purchasing a minimal amount from ELTRA to assist it in opening the Decatur plant.

[56] ELTRA already has on its payroll several skilled ceramics engineers, probably the most important factor in a successful insulator operation. There is no question about the company's ability to finance the necessary machinery. Actually, ELTRA purchased a surplus ceramics factory shortly after the acquisition in suit but later decided that it could be put to more profitable use at one of the firm's affiliated plants in Venezuela. Furthermore, it presently maintains a functioning insulator facility of modest size at Sarnia, Ontario.

Chrysler now considers ELTRA an acceptable supplier, the difficulty in dislodging Champion is monumental. Champion's unexcelled promotional campaigns are good for the franchise-dealer replacement trade. In addition, Champion has made a revolutionary concession in agreeing to furnish, starting in 1964, one quarter of Chrysler's assembly requirements under the latter's own "MoPar" brand, but still at six cents each, and, in effect, to subsidize an attempt to gain a foothold for "MoPar" with an eye toward eventually stripping "Champion" of the last vestiges of major new-automobile status. Barring a classic blunder, Champion's tenure seems secure for the near future.

The Government again utilizes a pincer strategy, challenging the acquisition from both a horizontal and a vertical standpoint; but the distinction between them is less sharp than in most cases. Unable to traverse several of the pivotal factual premises underlying plaintiff's contentions and hesitant about the validity of others, much of the defense speaks in the tenor of a demurrer. For instance, Ford admits it was a potential *de novo* spark-plug producer in the late 1950's but denies that the assumption of Fostoria and "Autolite" is likely to impair competition. Ford's position is rooted in its previously mentioned misinterpretation of the aim of Section 7 as the simple preservation of the number of consumer alternatives, which defendant acknowledges as it must under *United States* v. *Penn-Olin Chemical Co.*, 378 U. S. 158 (1964), includes would-be as well as existing industry entrants. If this were the solitary objective of the statute, a quick roll call would dispel the possibility of a violation. No firm has exited since 1960 in reaction to the asset transfer and none appears about to; and, whereas in that year Electric Autolite was a producer and

Ford an inchoate fabricator, now ELTRA and Ford are both viable plug makers. Indeed, an extension of this reasoning permits defendant to go further and put forth the assertion that the market is better structured today because two *de facto* competitors should wield more beneficial force than one extant and the other contingent. This analysis may be persuasive in some settings but the spark-plug arena is not one of them.

Defendant concedes that its posture as a potential entrant decreed the six-cent price to itself. Had this been the only result of Ford's latent capacity to manufacture, there would be little sense in pursuing the matter. Obviously, this below-cost scheme heightened the barriers to admission and of late has been a principal factor limiting first-class industry membership to three. However, pre-1961 Ford also had a pervasive impact on the aftermarket. While the record does not state in so many words that defendant affected the conduct of Electric Autolite and General Motors, it certainly moderated all of Champion's replacement-sales policies directly and, given the oligopolistic structure in which Champion was the keystone, must have touched those of the others derivatively. Compare *FTC* v. *Procter & Gamble Co., supra* at 598-99 (concurring opinion). The higher the general service-plug price level the more attractive the enterprise would have looked to defendant. Of course, its enthusiasm was dampened by the break it received on its factory needs by staying out, but Champion certainly was not so naive as to believe that Ford could be dissuaded in this manner under all circumstances. Thus, it behooved Champion to use discretion in retail-oriented activities. Autolite and General Motors would doubtless have followed in stride lest the lure of reducing repair bills with Champion elements should cause

the prevalent authenticity fixation to succumb to a universal recognition of a fact already comprehended by some mechanics who regularly interchanged brands where they did not have on hand the original-equipment type for a particular car: that top-calibre plugs for Chrysler and General Motors vehicles were available under the "Champion" name.

Happily, there is more than logic and theory to bolster these conclusions. Franchisees often found it cheaper and equally convenient to get wholesale spark plugs from Ford rather than from independent middlemen. Consequently, defendant placed large orders with Champion for replacements, accounting in 1960 for 13.2% of all of Champion's non-original-equipment sales. Needless to say, Ford possessed bargaining leverage; indeed, one of its witnesses volunteered that manipulating the charge for service elements was among "a lot of things" Champion could have done if Ford got too excited about integrating. Defendant's potential plainly had a bearing on what it paid. Furthermore, Champion's entire aftermarket felt Ford's presence because, by Federal Trade Commission mandate, the replacement price offered to defendant and to independent warehousers must be the same. *Champion Spark Plug Co., supra.*

Defendant refers to the role of an automobile builder-standby plug fabricator as "meaningless" because, were it to enter, a former assembly-line supplier would be left without a foundation for the aftermarket. The fates of Champion and Autolite, had Ford expanded through its own resources exclusively, are explored below. For the moment it is sufficient to observe that the greater the dependence of survival upon original-equipment identification, the more grave the elimination of Ford as a potential en-

trant from the viewpoint of consumer protection, the ultimate object of anti-trust legislation. While Ford was able to check any avarice on the part of Champion, there is now no similar counterbalance as to Ford, which will not be disengaged regardless how extravagant its replacement price may become. If any firm could be called meaningless, it would be ELTRA. Lacking important new-car affiliation, ELTRA looks at birth like a pygmy whose growth will be stunted by deficiencies for which no amount of exertion can compensate. It could indefinitely be without this critical backing and, thus, too crippled in the aftermarket to begin to curb Ford's excesses. Nor does it have an impact upon Champion other than in the latter's relations with Chrysler, which uses an occasional hint that it might deal with ELTRA as a club for making Champion toe the mark. However, Section 7 was no more enacted to foster the welfare of an isolated customer than that of a few sellers. *Cf. Brown Shoe Co.* v. *United States, supra; But cf. United States* v. *Von's Grocery Co., supra.* The ideal is broad competition in all of its ramifications and, where this in the more atomistic forms seems impossible, the goal is to salvage what remains. Here prior to 1961, defendant helped mollify the evils of ologopoly. Now the safety valve that was Ford is permanently sealed. More ominously, if "Mo-Par" ever catches on and becomes Chrysler's sole brand, every dominant original-equipment label will be liberated from the restraint inherent in a separation between name proprietor and automobile maker-replacements distributor.[87]

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[87] The record shows that certainly Chrysler and American Motors, and apparently most heavy internal-combustion-engine builders with franchise dealers at the retail level, wholesale replacement spark plugs through them.

The United States urges that Ford was on the very verge of entering through internal expansion and would shortly have done so if the natural trend of events had not been interrupted by the acquisition. Perhaps; but not on this record, although there are some positive signs. Because of the devotion to original-equipment brands, defendant was perfectly situated to expect success over a period of time. Moreover, a preliminary study in 1960 forecast a long-term after-tax yield on capital of 24.3% on the basis of a 5% penetration of the independent aftermarket. This rate was well above the 15% company norm for new investments and enough to induce the Business Development Office to recommend erection of a 52-million-unit plant. That the proposal was not processed in detail by Ford's Integration Committee and was never brought to the attention of either the Executive Committee or the Board of Directors can be blamed on the availability of Fostoria. However, this is all that can conscionably be laid at the door of the acquisition, which is not, as the Government would have it, virtually uncontestable evidence that Ford otherwise would have gone forward on its own.[58] Instead of posing as a handy answer to all questions about the unknown, the transaction, coming when it did, places a more onerous burden upon plaintiff. The Development

[58] Ford's own testimony shows plainly that the Integration Committee withheld formal action upon the Development Office report pending further study of the possibility of annexing Electric Autolite in whole or in part. There is no clear indication whether but for the eventual acquisition the proposal would have gone higher up through the chain of command—Operating Policy Committee, Administrative Committee, Executive Committee, Board of Directors—but, apparently, a project was scrapped by the Integration Committee itself only in unusual circumstances. While not every integration plan went as far as the Board of Directors before implementation, no final affirmative decision ever rested with the Integration Committee.

Office formulated no policies and in this case mentioned none decreed by higher authority. It did the initial spadework preparatory to a possible extensive investigation. Since one was never carried out, the Court has little information about how well in Management's opinion a plug project, which, with the six-cent price and dozens of other parts it could integrate, defendant had no compelling reason to undertake, squared with ordinary corporate guidelines for new ventures and even less about the guidelines themselves. Plaintiff must demonstrate at least that a grass-roots plan had a *prima facie* chance of approval in light of both Ford's financial conventions and organizational ambitions. Once these appear, their relative importance and, if need be, the degree of their flexibility, together with special incentives and market outlook can be used to weigh the probability of entry.

A plug factory would have fit neatly into defendant's designs for augmented component manufacture and distribution, and would have been worthwhile over the long haul. On the other hand, nothing has been said about start-up costs, although the inference is that they would have been heavy because of the lengthy experimentation necessary to arrive at satisfactorily engineered plugs.[59] In addition, in-

[59] More than one year elapsed following the acquisition in suit before "Autolite" and "Champion" spark plugs were approved for all Ford and Chrysler motors, respectively. When it commenced spark-plug production in 1936, it took Electric Autolite almost five years to become qualified on all Chrysler engine models. The parties have stipulated that development of correct spark plugs for factory installation requires "hundreds of thousands of miles of road-testing." The Development Office predicted start-up costs at $2-4 million. However, this estimate is highly suspect. First, it is about the same as the Office's computation of start-up costs for a battery operation which would have presented considerably less engineering difficulty. Second, testimony indicates that none of the engineering departments had much of a hand in preparing the Development Office report.

dustry stocking habits and the six-cent price pointed toward an extraordinary delay before the contemplated facilities would pay off. The unanimous consensus of experienced witnesses was that a minimum of five to eight years would elapse from the point Ford started using the new elements in its cars until enough Ford-plug-equipped automobiles would be on the road to create a real retailer interest in the product. Practically no machine requires a plug change during the initial 18 months of its life, and most do not much before their third anniversaries. Several model years' outputs would have to approach this milestone before their proportion of the whole vehicle population would prompt outlets to inventory the new brand. Only then would a mechanic pick this label for General Motors and Chrysler applications. Meanwhile, of course, defendant would be missing many sales for Ford machines. Few neophytes can expect an onrush of instant acceptance. All must prepare for a few lean seasons at the outset. What complicated the problem at Ford was the unusual arrangement with Champion. In 1960, defendant needed about 16 million assembly plugs; each would have been some 14 cents more expensive if sourced inside rather than to Champion. The aggregate differential, 2.2 million dollars, would have accumulated annually to form a worrisome deficit in itself—let alone when combined with unrecovered start-up outlays—by the time Ford scratched the surface in the aftermarket, and, because the loss would have recurred perpetually, may not have been erased for a number of years thereafter. The Development Office report did not touch upon these drawbacks. However, besides altering the framework within which the estimated rate of return must be viewed, they call for an understanding of the company's pay-out schedule. Yet, plaintiff has not probed for an in-

dication of the postponement defendant would have been willing to accommodate in the realization of an actual gain on its capital.[60] Since this wait would have been of concern to Ford, the Court cannot pretend that it did not exist. Although he was far from comprehensive in his reasons, Irving Duffy, a recently retired member of both the Integration and Executive Committees as well as of the Board of Directors, stated unequivocally that the six-cent price and the lapse between the beginning of mass production and lucrative volume would have prohibited entry around 1960 other than in a manner in which the interval could have been sharply reduced, *i.e.*, by the take-over of an established trade name. Because Mr. Duffy was so conclusory, he must be deemed to have been expressing his personal convictions. However, because plaintiff did not cross-examine this testimony, it was probably bedded on solid ground.

The United States maintains that Mr. Duffy's skepticism should be disregarded as devoid of "probative value" and that what Management would have voted to do absent the acquisition is "pure conjecture." The Government is the prosecutor in this litigation. It had not only the floor to refute what it thought false, but also the obligation to remove the question from the realm of speculation through evidence compatible with a rational decision on the likely tact of the particular firm under scrutiny with individual aims, insights and *modus operandi*. Plaintiff concentrates upon the first two of these factors, summarized in Ford's undeniable wish to improve service-parts income and in the

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[60] The Government's deficiency on this score is particularly hard to understand in light of one of its positions discussed in Part II, the implication of which is that, in plaintiff's view, the Motorcraft ignition-parts program may shortly have been disbanded had not the "Autolite" trade name been available, because the project had sustained a deficit in the early months of its existence.

belief that a spark-plug endeavor would eventually prove complementary. Thus, the Government emphasizes desire to the almost total neglect of practicality.[61] Yet the distance between them can be vast. Here, as in most cases, many appealing investments presented themselves.[62] Ford must rely upon criteria which experience has taught it are likely to lead to a judgment on the alternatives, palatable to its stockholders. So, too, must the Government.

Although the Court holds that Ford cannot be said to have been on the brink of integrating without Electric Autolite's contribution, it should examine the claim that the market would be constituted just as it is now if defendant had come in alone. This alleged equivalency of effect presupposes that had Ford struck out by itself, displaced Champion would have nudged Autolite from its niche at Chrysler, and, with no major original-equipment connection, Autolite's sale would have declined to a plateau approximating that on which ELTRA sits today. Whether the drop would have been this severe is debatable; but at least Autolite would have been headed for obscurity with no more expectation of revival than ELTRA actually has. On the other hand, if Champion would have wound up the odd-man-out in the wake of Ford's development, the story would have been different; for, while its performance would have suffered painfully, Champion probably would have retained enough strength to escape extinction by a comfortable margin.

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[61] The Government's only concession to practicality is to note that its evidence does show that Ford had sufficient funds to commence spark-plug manufacture and could have obtained the necessary technicians and expertise.

[62] See text preceding note 35 *supra*.

A witness from Chrysler did state that since "Champion" would not be linked to Ford in the public mind, it was better for Chrysler's franchisee trade to employ this label with greater aftermarket promotion and selling assistance than Autolite provided. However, the truth of the matter is that under the conditions at the time, the Spring of 1961, "Champion" was the only brand not belonging to a Chrysler competitor backed by a guaranteed supply.[63] Electric Autolite's Alabama plug facility was not yet operational. Although Ford was committed to sell Autolite plugs to allow it to meet unexpired contracts and compulsory renewals, they would not have had to be delivered under any name but "Autolite." Autolite's then-President recalls being told that while Chrysler would be glad to think about "Prestolite" later, the immediate object was, in his words, to move "as fast as possible to another brand that [was not] a competitor's brand." If Chrysler had been anxious for "Champion" for more than the choice it offered to dealing under an enemy ensign, this fact was a carefully guarded secret. Champion's Sales Manager, asked if he had any assurance of success before he solicited Chrysler, replied, "Not the slightest." What Chrysler would have done, if anything, in the event Ford had pushed Champion out other than in the method in which it did has not been proven. It may have preferred "Champion" but would not have been under the pressure of 1961 to abandon

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[63] Apparently, neither General Battery and Ceramic nor any of the smaller producers mentioned in note 51 *supra* bid for the Chrysler business. Thus, its options were Ford, General Motors, the denuded Autolite and Champion.

There is no reason to believe that Electric Autolite would not have been willing to make the "MoPar" brand concession which Champion gave to Chrysler nor evidence to suggest that it could not have afforded to.

"Autolite." In a tranquil milieu, a change may not have seemed worth the aggravations in qualifying another manufacturer to its standards, especially when, as its Purchasing Vice President revealed, it already intended to inaugurate some type of "MoPar" plug program.

The second inaccuracy in defendant's argument is the implicit notion that the potential-entrant doctrine is without relevance unless a *de novo* entry would better redistribute the market among more contenders than would a partial acquisition. An interested firm on the outside has a twofold significance. It may someday go in and set the stage for noticeable deconcentration. While it merely stays near the edge, it is a deterrent to current competitors. *United States* v. *Penn-Olin Chemical Co.*, 378 U. S. 158 (1964). This was Ford uniquely, as both a prime candidate to manufacture and the major customer of the dominant member of the oligopoly. Given the chance that Autolite would have been doomed to oblivion by defendant's grass-roots entry, which also would have destroyed Ford's soothing influence over replacement prices, Ford may well have been more useful as a potential than it would have been as a real producer, regardless how it began fabrication. Had Ford taken the internal-expansion route, there would have been no illegality; not, however, because the result necessarily would have been commendable, but simply because that course has not been proscribed.

The last phase of the discussion involves the foreclosure of Ford as a 1960 purchaser for all purposes of almost forty million units, or 9.6% of total industry output. Unlike Owosso, Fostoria can fill defendant's entire demand for its traditional assembly and franchisee uses as well as for Electric Autolite's old independent distribution channels. In spite of what seems to be a blatant Clayton Act violation

according to the teaching of *Brown Shoe Co.* v. *United States, supra,* in particular when seen against the background of the exclusion at General Motors, Ford maintains that, practically speaking, the acquisition did not bring about any denial of access to any supplier but Champion—and the Government apparently finds no cause for alarm in Champion's misfortunes—because for decades no firm besides Champion had much hope for any of defendant's business. Ford points to the six-cent concession along with Champion's virtually limitless ability to lower it, which supposedly adds up to barely a possibility that Ford would ever be justified in sacrificing half a century of engineering rapport and Champion's aftermarket support by buying elsewhere. The argument flounders in the stagnation required to keep it afloat. At best, it proves that Ford would not have deviated from its past sourcing in the foreseeable future. However, the horizon in that direction is very close and opaque to new circumstances just beyond.

The record shows that Ford had hinted as far away as Germany that it would turn a receptive ear toward proposals for plugs under its own name. Whether a firm like General Battery and Ceramic would ever come up with an arrangement to absorb enough of the temporary financial loss which would accompany purely internal growth to make a private-label venture attractive where integration would be precluded is not the issue, nor is there any evidence regarding even the present feasibility of such an alternative to in-house construction. What hurts is that the opportunity to try has been taken away.[64]

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[64] The mention of General Battery and Ceramic only is not meant to be exhaustive of the possibilities, but simply to recognize the fact that as late as three weeks before the acquisition in suit this firm was in touch with Ford on a private-brand plug proposal. In addition, one cannot overlook GB&C's recently heightened interest

While the legality *vel non* of a corporate combination cannot turn on the assumption that something might happen sometime which would cast it in a different light, a court cannot shut its eyes to contemporary or predictable factors conducive to change in the competitive structure. The acquisition of an aggressive contender can be seriously damaging even though it currently has an infinitesimal market share and a dozen more firms of similar penetration are left behind. *United States* v. *Aluminum Co. of America, supra.* Concern has been expressed in some cases that a particular merger has significantly raised the barriers to entry, apparently even without a showing that any company was knocking on the door at the moment. *E.g., General Foods Corp.* v. *FTC,* 386 F. 2d 936 (3d Cir. 1967). The effect in *Alcoa* was the removal of a competitor, a recognized instrument for changing beneficially the degree of concentration which was then manifest. The result here is the destruction of the motivation which Ford, even though long a Champion customer, gave other plug makers to work a change which could lead to deconcentration. Indeed, it is much more: the elimination of one of the very few discernible ways in which such a change could be brought about. A small plug fabricator, dissatisfied with its lowly rank, had extremely limited options. Apart from building automobiles or convincing several million more people to buy American Motors cars, it either had to persuade innumerable retailers to break with their quite rational stocking practices or sell to Ford or Chrysler.[65] While gaining acceptance at Ford

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in selling more batteries, another product of which Ford was a major buyer. See text accompanying note 44 *supra.*

[65] Even the truck market offered little independent opportunity, for Chrysler, Ford and General Motors accounted for 75% of production, totaling 1.2 million units, including jeep-type vehicles, in 1960.

would not have been easy, it was doubtless a less difficult path than most of the others. Obviously, a chance to take whatever steps were necessary to secure the Ford account meant more in terms of reducing the influence of the oligopolistic forces in the spark-plug industry than did one small company in the *Alcoa* aluminum-conductor fields.

V

AUTOMOBILES

The vehicles comprising the automobile line of commerce are four-wheeled passenger cars, of which there are, for all practical purposes, four United States manufacturers: American Motors, Chrysler, Ford and General Motors. In 1964, their respective shares of domestic production, for sale at home and abroad, were 5.1%, 16%, 27.7% and 51.1%. The Government contends that the acquisition deprived the two smallest firms

> "of access to a substantial independent [*i.e.*, not a part of Ford or GM] supplier of spark plugs [and to] a significant independent brand name for batteries, spark plugs and ignition parts."

One cannot quarrel with the validity of this statement, at least if "substantial" is taken to refer to present output and "significant" to mean "familiar." However, even with all the adjectives, there is not a shred of evidence that it has any bearing upon the competitive position of either American or Chrysler.

Noting the purchase by both companies of "Autolite" plugs and batteries for factory installation for some time before April 1961, the Government says:

"It is clear that [the two firms] had built up a long-standing, important association between their brand of automobiles and Autolite-branded items with resultant consumer goodwill."

Maybe plaintiff believes that it was the fear of someday being accused of monopolizing the industry on the strength of the goodwill created by "Autolite" which persuaded American Motors to use twice as many "Champion" as "Autolite" plugs on its assembly lines in 1959 and 1960 and to seek bids for a private-label "Rambler" battery as early as the Fall of 1960. Chrysler introduced its own name, "Mo-Par," on batteries around 1956, and, according to its Purchasing Vice President, would have moved toward a corporate identity symbol for plugs, as it has to some degree, regardless of the "Autolite" transfer.[46] Not surprisingly, the United States found no witness nor even any Management opinions tucked away in defendant's files to suggest

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[46] American Motors discontinued all spark-plug and battery sourcing to Electric Autolite in June 1961. According to its then-Executive Vice President, the battery decision turned upon the fact that Autolite would not furnish under a private label a battery of the special design (with 24,000-mile warranty) American wanted. This episode fairly summarizes the whole component-branding situation from the vehicle builder's standpoint. It would generally take parts with its own name—to give the appearance of integration and to allow it to capitalize on the demand for original-equipment-type replacements—if it could get them and still be assured of proper quality. The exception to the norm would be items like spark plugs, which are heavily advertised in the aftermarket by the brand proprietor. Here, the publicity can do some good in advancing replacement sales through franchise dealers, and the vehicle builder may prefer to "ride with" the supplier's campaign. The Government has not suggested a formula for translating into substantial competitive disadvantage in the automobile field the possible loss to Chrysler and American from reduced aftermarket plug sales if either is forced to stop buying "Champion" elements and, not wishing to turn to Ford or General Motors, must settle for a brand less strongly promoted than "Autolite" was.

an instance in which an automobile had been sold, wholly or partially, because of the brand on its spark plugs or battery, let alone on articles buried deeper inside the motor. It is doubtful that any court has been asked to make a smaller tail wag a larger dog than was this one when it was requested to hold, in effect, that persons, either generally or in numbers large enough to meet the substantiality test of Section 7, rest their decisions on two thousand dollar-and-up cars upon the *trademark* on a few components.

The record contains the views of many persons regarding the attitudes of the several automobile builders about dealing in parts with one another. In summary, they prefer not to, but have little hesitation where one of their rivals offers the best price and/or the highest quality. However, neither American nor Chrysler is under any more compulsion now than it ever was to procure spark plugs from Ford or General Motors. While ELTRA is not a major fabricator in the quantitative sense, it is unquestionably an experienced and respected plug manufacturer capable of meeting the needs of any internal-combustion-engine producer. In fact, representatives from both American Motors and Chrysler classified ELTRA as an acceptable supplier, although the issue is quite hypothetical; for, as Part IV suggests, where the next spark plug is coming from has traditionally been among the less weighty matters on the minds of Detroit executives. It is immaterial that ELTRA to date has been more ready to sell than any big customer has been willing to buy, with the result that the company thus far has felt it uneconomical to mold ceramic insulators itself. ELTRA can, and should be able to continue to, deliver satisfactory goods on schedule and at a tolerable

cost.[67] This is all that must be found to conclude that there is not a tenable probability that since today's ELTRA has been substituted for the Electric Autolite of 1960, American Motors or Chrysler will be left with Champion as the only alternative to relying upon their own competitors for spark plugs.

The most plausible argument, which, incidentally, the Government has not expressly presented, is that the acquisition has increased the chance that American Motors may at some point in the future be denied the six-cent price for spark plugs. Its low volume does not now justify any plug maker in providing this accommodation to it alone.[68] The inference is that American has been receiving the benefit because it has always bought from a supplier to another automobile firm with an output large enough to warrant the minimal charge. In 1961, the number of such customers was reduced to Chrysler, which may eventually use only "MoPar"-branded elements and, thus, forego the six-cent arrangement premised on the understanding that the car manufacturer will give exposure to the plug company's proprietary label. Even if, in this event, American also has no one agreeable to granting it the special discount,

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[67] See notes 55 and 56 *supra* and accompanying text. The fact that ELTRA has no ceramic capacity at its Alabama plug plant seems particularly unimportant in determining its status as a supplier to an automobile builder because of the long time required to engineer plugs to assembly-line specifications (see note 59 *supra*). During this interval, ELTRA could doubtless complete an insulator facility, plans for which, incidentally, have been prepared for several years. In any event, nothing justifies a finding that the competitive position of American Motors or Chrysler would be impaired by their purchasing ELTRA plugs containing insulators gotten from another producer, including Ford. Indeed, no evidence suggests competitive injury if they obtained the whole plug from Ford.

[68] See text following note 50 *supra*.

the effect upon its competitive ability would be insignificant and very likely totally undetectable, given the relative worth of half-a-dozen spark plugs next to the hundreds of other parts which must be brought together to turn out a vehicle.

American Motors is the least integrated of the four car companies under discussion. What this means in specific comparative terms is not shown, nor is the extent of the market advantage of the other three over American, if any, attributable to their greater internal construction. Arguably, were the disparity great, they could stand noticeably stronger because of it. Nevertheless, the instant acquisition is itself minor in scope, covering only two articles. Both of them are cheap to purchase, with or without the six-cent consideration, and one, the battery, is quite easy and inexpensive to manufacture. Therefore, were Ford someday to become completely integrated, the items it added in 1961 would account for a tiny proportion of whatever superiority it could ultimately attain. The combination in issue logically leads to no others, nor will it have a causal connection with further grass-roots expansion except in the battery area. Thus, while it is unknown whether defendant will ever achieve an edge over American Motors (or Chrysler) because of more encompassing inside production, or will pursue a path of growth which will elevate the barriers to entry into the automobile field noticeably higher than they are now, this much is certain: the Ford-Autolite compact will not have been responsible for the outcome.

To condemn the acquisition on the ground that the probable result will be a substantial lessening of competition in the automobile line of commerce through the weakening of either American Motors or Chrysler requires, on the evidence submitted, an "almost unlimited extrapolation in the name of incipiency." Bork and Bowman, *The Crisis in*

Anti-Trust, 65 Colum. L. R. 363 (1965). To premise illegality upon the notion that admission for newcomers has been made more difficult calls for approaching the question with a vengeance over what transpired in the industry decades ago.

VI

Conclusion

On the basis of the foregoing facts and discussions of the applicable principles of law, the Court holds that the effect of the acquisition of the previously described assets of The Electric Autolite Company by Ford Motor Company may be substantially to lessen competition in automotive batteries and spark plugs throughout the United States, but that the acquisition probably will have neither this result nor a tendency to create a monopoly in automobiles or ignition parts in any section of the country.

> "The phrase ['in any line of commerce'] is comprehensive and means that if the forbidden effect or tendency is produced in *one* out of *all* the various lines of commerce, the words 'in *any* line of commerce' literally are satisfied." *Van Camp & Sons Co.* v. *American Can Co.*, 278 U. S. 245 at 253. See also *United States* v. *E. I. du Pont de Nemours & Co.*, 353 U. S. 586.

For these reasons, the acquisition constitutes a violation of Section 7 of the Clayton Act.

/s/ Ralph M. Freeman
Ralph M. Freeman
Chief United States
District Judge

Dated: Detroit, Michigan
June 7, 1968.

Final Judgment Proposed by Department of Justice

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF MICHIGAN

SOUTHERN DIVISION

Civil Action No. 21911

UNITED STATES OF AMERICA,

Plaintiff,

v.

FORD MOTOR COMPANY and THE ELECTRIC AUTOLITE COMPANY,

Defendants.

FINAL JUDGMENT

Plaintiff, the United States of America, having filed its complaint herein on November 27, 1961; defendants Ford Motor Company and Electric Autolite Company having filed their answers denying the substantive allegations of such complaint; full trial on all issues of liability and relief being had; and the parties having briefed the court on all issues of fact and law:

NOW, THEREFORE, it is hereby ORDERED, ADJUDGED AND DECREED as follows:

I.

This Court has jurisdiction of the subject matter hereof and of the parties hereto.

The acquisition in 1961 by Ford Motor Company of an operating battery factory in Owosso, Michigan, an operat-

ing spark plug factory in Fostoria, Ohio, and the tradename and trademark "Autolite", from the defendant Electric Autolite Company, violated Section 7 of the Clayton Act.

II.

As used in this Final Judgment:

(A) "Person" means any individual, partnership, firm, corporation, association or other business or legal entity;

(B) "Ford" means Ford Motor Company, a Delaware corporation;

(C) "Subsidiary" means any person controlled by, or more than fifty per cent of whose voting stock is directly or indirectly controlled by, defendant.

III.

The provisions of this Final Judgment shall apply to defendant Ford and to each of its subsidiaries, successors and assigns, and to each of their respective officers, directors, agents, employees, successors and assigns, and to those persons in active concert or participation with any of them who receive actual notice of this Final Judgment by personal service or otherwise. A purchaser of the assets or stock pursuant to this Final Judgment shall not be considered a successor bound by this Final Judgment.

IV.

Ford shall, within one year from the date of entry of this Final Judgment, divest itself of all its interest in the tradename and trademark "Autolite"; all of its facilities for the production and distribution of automotive batteries

and spark plugs; and all other personnel and assets needed to assure that said facilities are going, viable businesses.

The assets divested shall include, but shall not be limited to, substantially those assets, with substantially the same functional organization, as were the spark plug and battery businesses of The Electric Autolite Company at the time of their acquisition by Ford in 1961, coupled with such improvements, betterments, replacements and additions made by Ford since such acquisition up to the date of the divestiture.

V.

The divestiture ordered in Section IV above shall be so structured that the spark plug facilities and the tradename and trademark "Autolite" shall be owned by the same entity. The battery facilities may be separately divested, if plaintiff first approves.

VI.

Ford shall agree to purchase "Autolite" branded spark plugs from the operator of the divested spark plug factory, representing the following percentages of Ford's total annual requirements:

First Year	100 per cent
Second Year	100 per cent
Third Year	100 per cent
Fourth Year	80 per cent
Fifth Year	70 per cent
Sixth Year	60 per cent
Seventh Year	50 per cent
Eighth Year	40 per cent
Ninth Year	30 per cent
Tenth Year	20 per cent

VII.

Ford shall use its best efforts to maintain the assets to be divested, until the time of divestiture thereof, as a going, viable concern, at standards of operating performance, including personnel, prevailing at the time of entry of this Final Judgment.

VIII.

No divestiture shall be made directly or indirectly, to any person who is at the time of divestiture (a) an officer, director employee, or agent of Ford, or (b) who beneficially owns, or has power to vote, or controls, or has rights to own or control, more than one (1) per cent of the outstanding shares of common stock of Ford, or (c) in whom Ford has a financial interest whether by any equity interest or otherwise.

If divestiture is accomplished in whole or in part by distribution of stock, defendant Ford shall arrange that any officer or director of Ford, or any stockholder of Ford beneficially owning or controlling, or having rights, in excess of an aggregate of one per cent (1%) of defendant's outstanding shares entitled to vote, shall within six (6) months of receipt of divested stock dispose of all divested stock to a person not subject to this paragraph.

IX.

(A) If defendant proceeds with divestiture by sale, then not less than forty-five (45) days prior to the closing date designated in any contract for the sale of the assets or stock to be divested, defendant shall advise plaintiff in writing of the name and address of the proposed purchaser together with the terms and conditions of the proposed sale, and

such other information concerning the transaction as plaintiff may request within fifteen (15) days from the receipt of the aforesaid advice. At the same time, defendant shall also make known to plaintiff in writing the names and addresses of any other person or persons who have made an offer in writing, or expressed in writing a desire, to purchase any such assets together with the terms and conditions thereof.

(B) Not more than twenty-one (21) days after the receipt of the information required by this Section IX (A), plaintiff shall advise defendant in writing whether it objects to the proposed sale. If plaintiff does not object to the proposed sale, it may be consummated, but if objection is made, then the proposed sale shall not be consummated until plaintiff's objection is withdrawn or defendant obtains approval by the Court.

(C) The time period set forth in Section IV shall be tolled during the pendency of any proceeding in this Court under this Final Judgment relating to approval of a proposed sale which delays the consummation of the divestiture transaction proposed by defendant.

X.

If divestiture is accomplished in whole or in part by means of sale of stock in the spark plug or battery business to the public, defendant Ford shall prohibit each of its officers, directors or stockholders subject to Section VIII of this Judgment from acquiring or owning any such stock so long as he remains in any such position.

XI.

Defendant is enjoined from reacquiring control over any of the divested assets, and from (a) acquiring or holding

any assets of or stock or other beneficial interest in any person engaged in the manufacture or sale of (i) automotive spark plugs or (ii) automotive batteries, and (b) for a period of ten (10) years after the divestiture required in Section IV above, otherwise engaging in the manufacture of spark plugs for its own use or consumption, or for sale to others.

XII.

For the purpose of securing or determining compliance with this Final Judgment:

(A) Any duly authorized representative or representatives of the Department of Justice shall, upon written request by the Attorney General or the Assistant Attorney General in charge of the Antitrust Division and on reasonable notice to defendant Ford, made to its principal office, be permitted:

(1) Access during the office hours of defendant, to all books, ledgers, accounts, correspondence, memoranda, and other records and documents in the possession or under the control of defendant which relate to any matters contained in this Final Judgment;

(2) To interview officers or employees of defendant regarding any such matters.

(B) Upon written request of the Attorney General or the Assistant Attorney General in charge of the Antitrust Division, defendant shall submit such reports in writing with respect to any matters contained in this Final Judgment as from time to time may be requested.

(C) No information obtained by the means provided for in this Section XII shall be divulged by any representative

of the Department of Justice to any person other than a duly authorized representative of the Executive Branch of the United States, except in the course of legal proceedings to which plaintiff is a party for the purpose of securing compliance with this Final Judgment or as otherwise required by law.

XIII.

Jurisdiction of this cause is retained by this Court for the purpose of enabling any of the parties to apply at any time for such further orders or directions as may be necessary or appropriate for the construction or carrying out of this Final Judgment, for the modification of any of the provisions thereof, for the enforcement of compliance therewith, and for the punishment of violations thereof.

XIV.

Defendant Ford shall pay all taxable costs herein.

RALPH M. FREEMAN
Chief United States District Judge

Dated:

Final Judgment Proposed by Ford Motor Company

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

Civil Action No. 21911

UNITED STATES OF AMERICA,

Plaintiff,

v.

FORD MOTOR COMPANY and
THE ELECTRIC AUTOLITE COMPANY,

Defendants.

FINAL JUDGMENT

This cause having come on regularly for trial, and the Court, having fully considered the evidence, briefs and arguments of counsel, and having filed its Opinion, constituting its Findings of Fact and Conclusions of Law, on June 7, 1968, and the cause having thereafter come on regularly for hearing on the form of final judgment, and the Court being fully advised herein,

NOW, THEREFORE, IT IS ORDERED, ADJUDGED AND DECREED AS FOLLOWS:

I

As used in this Final Judgment:

(A) "Ford" shall mean defendant Ford Motor Company;

Final Judgment Proposed by Ford Motor Company

(B) "Electric Autolite" shall mean defendant The Electric Autolite Company;

(C) "ELTRA" shall mean ELTRA Corporation, the corporate successor, by merger, to Electric Autolite;

(D) "Plaintiff" shall mean United States of America.

II

This Court has jurisdiction of the subject matter of this action, and of Plaintiff, Ford, Electric Autolite and ELTRA, the parties hereto, pursuant to Section 15 of the Act of Congress of October 15, 1914 (15 U.S.C. § 25) as amended, commonly known as the Clayton Act.

III

On the basis of the facts and discussions of the applicable principles of law as set forth in the Opinion, the effect of the acquisition from Electric Autolite of the assets described in the Opinion may be substantially to lessen competition in automotive batteries and spark plugs throughout the United States, but the acquisition probably will have neither this result nor a tendency to create a monopoly in automobiles or ignition parts in any section of the country. For these reasons, the acquisition constitutes a violation of Section 7 of the Clayton Act.

IV

The provisions of this Final Judgment shall apply to defendants and to each of their officers, agents, servants, employees and attorneys and upon those persons in active concert or participation with them who receive actual notice of this Final Judgment by personal service or otherwise.

Final Judgment Proposed by Ford Motor Company

V

A. Ford is ordered and directed:

(1) As soon as practicable, and at its own cost and expense, to transfer and deliver to ELTRA (or at the election of ELTRA to finance acquisition as soon as practicable by ELTRA of) such Cold Heading Machines and Chuckers as may be necessary, when joined with the other and additional spark plug manufacturing equipment and facilities to be installed by ELTRA pursuant to subparagraph C hereof, to increase ELTRA's spark plug producing capacity to at least 56,000,000 spark plugs per year;

(2) To agree to purchase from ELTRA at least 30,000,000 spark plugs per year bearing the trademark "Autolite" for a period of 10 years at such price or prices, and upon such other terms and conditions (including, but without limitation, such matters as specifications; qualification of the plugs; acceptance of quality; and schedules for delivery, etc.), as from time to time are agreed upon between Ford and ELTRA, and

(3) To agree that if, during the 10 year period, any curtailment of Ford's said purchases is necessary in any year to enable ELTRA to meet requirements of other customers, Ford will reduce its purchases, upon reasonable notice, to the extent requested by ELTRA for such year.

B. Ford and ELTRA are authorized and directed to enter into such written contract or contracts as in their judgment may from time to time be necessary or appropriate to carry out the provisions of subparagraph A above.

C. ELTRA is ordered and directed, at its own cost and expense:

(1) To install said Cold Heading Machines and Chuckers as soon as practicable; and

(2) To provide and install as soon as practicable such other and additional ceramic and other spark plug manufacturing facilities and equipment as are necessary, when joined with said Cold Heading Machines and Chuckers, to increase ELTRA's spark plug production capacity, including self-sufficiency in shells and insulators, to at least 56,000,000 spark plugs per year, and

(3) To increase production of spark plugs as soon as practicable to a volume sufficient to provide spark plugs (a) to Ford in accordance with the provisions of subparagraph A above and (b) to customers of ELTRA other than Ford.

VI

A. For a period of 10 years from and after the date of entry of this Final Judgment, Ford is enjoined and restrained, except upon consent of the Court obtained by application to the Court on notice to the plaintiff:

(1) From acquiring, by purchase, merger, or acquisition of stock or other securities, any battery business or factory for the manufacture of automotive batteries in the United States;

(2) From acquiring, by purchase, merger, or acquisition of stock or other securities, any spark plug business or factory for the manufacture of spark plugs in the United States;

B. For a period of 5 years from and after the date of entry of this Final Judgment, Ford is enjoined and restrained:

From construction of additional factories for the manufacture of automotive batteries at locations in the United States other than where its existing battery factories are located.

VII

For the purpose of securing compliance with this Final Judgment, and for no other purpose:

A. Duly authorized representatives of the Department of Justice shall, upon written request of the Attorney General or Assistant Attorney General in charge of the Antitrust Division (and on reasonable notice to Ford or ELTRA, as the case may be) made to the principal office of such defendant, be permitted, subject to any legally recognized right or privilege:

(1) access during reasonable office hours of such defendant, which may have counsel present, to all books, ledgers, accounts, correspondence, memoranda, and other records or documents in the possession of or under the control of such defendant relating to any matter contained in this Final Judgment;

(2) subject to the reasonable convenience of such defendant, and without restraint or interference from it, to interview officers or employees of such defendant, which may have counsel present, regarding such matters.

B. Upon written request of the Attorney General or the Assistant Attorney General in charge of the Antitrust Divi-

sion, each defendant shall submit such reports in writing in respect of matters contained in this Final Judgment as may be from time to time reasonably requested.

No information obtained by the means provided in this paragraph VII shall be divulged by any representative of the Department of Justice to any person, other than a duly authorized representative of the Executive Branch of plaintiff, except in the course of legal proceedings to which the United States of America is a party for the purpose of securing compliance with this Final Judgment, or as otherwise required by law.

VIII

Ford shall pay all taxable costs herein to the date of Final Judgment.

IX

Jurisdiction of this cause is retained by this Court for the purpose of enabling any party to this Final Judgment to apply to this Court at any time for such further orders or directions as may be necessary or appropriate for the modification, termination, construction or carrying out of the provisions of this Final Judgment, and for the enforcement of compliance therewith.

Dated: .....

.....

United States District Judge

ELTRA hereby consents to entry of the foregoing Final Judgment.

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Attorneys for ELTRA

Opening Statement at Relief Hearing, William H. McManus, Attorney, Department of Justice

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[15] Now, as in El Paso and the Von's cases, the Supreme Court has ruled:

"Since appellees have been on notice of the anti-trust charge from almost the beginning, we not only reverse the judgment but direct the District Court to order divestiture without delay."

The Supreme Court's three rulings in El Paso litigation revealed this Court's profound concern that complete divestiture be described to remedy violations. Subsequent to its initial mandate in 1964 of divestiture without delay, the Court twice proposed final decree as being insufficient.

Your Honor, unfortunately, in the El Paso cases, we agreed with the defendants on a judgment which was less than complete divestiture. When I say "unfortunately—" it is because when it got up to the Supreme Court, the Supreme Court castigated us pretty well for giving in to any such relief short of complete divestiture but would restore competition to at least the position it was prior to the acquisition.

Now, while I am on this point since the appellees have been on notice of the anti-trust charges from almost the beginning, I would like to point out the situation here.

[16] It is true, Your Honor we did not file this suit until approximately six seven or eight months after the acquiisition took place.

The Court: When did the Government first notify Ford about this matter, or did the Government have any knowledge before?

Opening Statement at Relief Hearing, William H. McManus, Attorney, Department of Justice

[17] The Government had no knowledge of this matter prior to the time that the contract of acquisition had been signed, and to my understanding, title had passed.

If you recall, during the trial there was mention—when the negotiations for this acquisition were in the initial stages, they referred to the Mars and I think O'Riley. I think they had a couple of wild names that they were using so that people even in Ford could not find out that these negotiations were in progress. And the newspapers didn't know about it. So we had no way of knowing from published sources, and we didn't know about it. And from the records in the department, show that on the day of the—when the contract had been signed, my understanding, title had passed. They were kind enough at that time to come in and tell the Department of Justice, "We have gone through with this. We don't think there is anything wrong with it, but we are letting you know. And if you want to find anything about it, write us a letter within four days."

We did.

The Court: When did they do that?

Mr. McManus: They did that the day either that they signed the contract—after the contract was signed, they notify us.

The Court: Same day?

Mr. McManus: Same day. As I understand [18] —as I understand it.

The Court: That was—

Mr. McManus: April 12, as I understand.

The Court: April 12th?

Opening Statement at Relief Hearing, William H. McManus, Attorney, Department of Justice

Mr. McManus: Within the week, within the week, your Honor. Within a week, I should say, we had sent letters of inquiry to the Ford Motor Company asking for information relating to the acquisition. We moved promptly to gather the information, and as soon as we had sufficient information to determine that we believed this acquisition violated the law, we filed it.

The Court: Suit was filed in November, was it?

Mr. McManus: Yes, Your Honor.

The Court: About six or seven months later.

Mr. McManus: Yes, around six or seven months later we filed the suit.

Now, of course, this entailed us getting information from Ford, this entailed us getting information from other companies and from other people before we filed the suit. Also, we had to go through the laborious process of moving papers from the working staff up to the Attorney General and back.

It would have been a little late anyway for us to try to get a preliminary—I mean a temporary restraining [19] order, because the matter had already been consummated.

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Testimony of H. Michael Mann, Associate Professor of Economics, Boston College; Special Assistant to the Assistant Attorney General, Antitrust Division 1968-69

DIRECT EXAMINATION

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[101] Q. Now, directing yourself to merger problems: We have had testimony here at trial that there are various types of mergers, horizontal, vertical, and those that have potential effects.

Q. What type of integration would you consider the Ford acquisition of Autolite? A. This I would consider a vertical merger, or partial acquisition.

Q. Now, what factors or benefits usually derive in a vertical integration? A. Well, economists tend to focus on two major motivations for vertical merging, or vertical integration of a de novo sort. One would be that it is more efficient to combine two stages of operations than to operate the stages separately. This seems to occur most normally in cases where some technological imperative that makes sense for the operations to be combined.

For instance, often, as I understand it in the metal industries, it pays to combine the fabrication of metals and the finishing of them at the same process so that the metals won't be corroded in the process of waiting for finishing.

The other major motivation appears to be cases where a firm faces a monopoly price which is being [102] charged to it in something it purchases. In this case it could pay a firm to vertically integrate in order to avoid having to pay the monopoly price. Because clearly, if it makes the operation for which it is paying the monopoly price part of its own operation, then it only pays the cost of producing rather than the monopoly market price.

Q. Excuse me. Go ahead. A. To go on, this, I think, that in the particular case which we're concerned, that one can also add to this that there may be particular market instances in which a firm sees the opportunity to not only bypass a monopoly price that may be charging it, but to capture for itself the monopoly profits that can be thereby derived through a vertical process. And I think that in the spark plug market this is particularly easily documented.

[103] Q. Would you explain what you mean when you say this is easily documented in the spark plug market? A. Well, first, let me indicate why one might expect monopoly prices for spark plugs.

First, it's a highly concentrated market; three firms account for nearly all the production. It is also an industry which has high barriers to entry. These high barriers to entry come from two sources. One is attributable to the O.E. replacement tie, that is, that apparently it is the case that mechanics, jobbers, wholesalers, distributors of spark plugs feel that it's important to tie the replacement part plugs to the O.E. equipment. This means that the O.E. contract becomes the sine qua non of successful selling in the replacement after-market and that it's very difficult, apparently, to break this tie, that an independent firm attempting to make a go in this market would have a very difficult time making inroads against this established tradition or whatever one wishes to call it.

Secondly, and not entirely independent from this effect, is that the economies of scale are very important in this market. As I understand it, one would need to produce somewhere between 50 and 70 million plugs annually to have an efficient operation. If one in today's market estimates the replacement market [104] to be somewhere around 600 million plugs, this would indicate that one could

have around 10, maybe, efficient single plant firms. However, the 600 million plugs or thereabouts are not an X plug, but are tied by the O.E. replacement into particular brands; so that the market is fragmented and in a sense much smaller than is indicated by the 600 million plug market.

So it means that a firm that has to build an efficient plant and be ready to try to distribute 50 to 70 million plugs finds itself attacking three separate markets; AC, Autolite and Champion, and the percentage of those separate markets, which is 70 million, is much larger than 70 million of 600 million. This means that the spark plug market then to the economist has two important structural characteristics. It's highly concentrated and it has high barriers to entry.

It has been demonstrated through the research of economists that markets with these characteristics, high concentration and high barriers to entry,—

The Court: High concentration and high what?

A. High barriers to entry.

—earn the firms which operate in [105] these kinds of markets, earn rates of return on their capital which persistently, and by persistently I mean year-after-year over long periods of time, a higher rate of return earned on the average in manufacturing. If we are generous and call the rate of return, general rate of return in manufacturing which is roughly around 10 per cent as a measure of the opportunity cost of capital, that is, the rate of return which is necessary for firms to maintain their investment and commitments to industries, firms and industries with high barriers and high concentration do a lot better than that continually.

Q. (By Mr. McManus, continuing): Have you had an opportunity to study any of the firms in the spark plug

industry? A. Yes, I have. I looked up in Value Line Investment Survey the rates of return for the one company which is a public company at this point, Champion. In the years 1952 to 1968 Champion earned an average of 25 percent rate of return on net worth. The lowest rate of return which Champion experienced during that period of time, if Value Line figures are correct and there is no reason to question them that I know of, the lowest rate of return was 18 percent, a little over 18 percent. This was the lowest.

The Court: 18 to 25 percent?

A. 25 percent, your Honor, was the average over this whole [106] period of the 16 year period of time. The lowest any individual rate of return, and it's the lowest year, was 18 percent. This was, I think, in—I can check it.

The Court: What period of time?

A. 1952 to 1968.

The Court: '62 to '68?

A. '52 to '68.

1963 Champion earned 18.8 percent. That was the lowest rate of return in that period of time.

Q. (By Mr. McManus, continuing): Do you have figures there for the rate of return for Champion during the period, say, 1952 through 1968? A. Yes, I do.

Q. I wonder if you could read into the record what those were during that period?

The Court: What does this represent now, these figures?

Q. (By Mr. McManus, continuing): Will you tell the Court what that represents? A. The following is the rate of return on common equity for Champion for each of the years 1952 to 1968.

In 1952, the return was 28.7; 1953, 29.0; 1954, 37.9; 1955, 35.7; 1956, 31.8; 1957, 27.7; 1958, 26.6; 1959, 25.3; 1960, 23.7; 1961, 20.2; 1962, 19.1; 1963, 18.8; 1964, 19.8; 1965, 20.6; 1966, 21.3; [107] 1967, 21.1; 1968, 23.8.

Q. You said that the normal rate of return in the industry would be approximately what? A. Ten percent, if I am generous. I think 10 percent is, that to use the average of manufacturing, is the normal or competitive or rate of return or measure of the opportunity cost to capital is inflated some but I am willing—

Q. Taking General Motors, for example, who is a large automotive manufacturer, would you have any idea of what their rate of return is for any particular year or period? A. Yes.

The Court: Now, this is rate of return on what, all manufacturing?

Mr. McManus: All manufacturing, yes, your Honor.

A. General Motors over the period 1950 to 1966 earned 21.6 percent net income to net worth.

Q. (By Mr. McManus, continuing): So that's lower than Champion? A. Lower than Champion's.

Q. Did you make a similar study of General Motors breaking it out insofar as their spark plug production? A. To my knowledge, one cannot get that data in public records so that this figure represents the consolidated presenta- [108] tion of General Motors that one can read from Moody's Industrials.

Q. How about Ford's spark plug production? A. To my knowledge, again, the separate data are not available and Ford's rate of return would be read from a source like Moody's Industrials as a consolidated return covering all their operations.

Q. And, to your knowledge, Champion is the only one broken out and that is why you used Champion, is that correct? A. That's right.

* * * * *

[113] Mr. McManus: Now, your Honor, when we left off yesterday afternoon, as I recall, Dr. Mann had indicated that the profits in the spark plug field, at least as he was able to ascertain from the leading company, were between two and three times greater than that of the average company in the United States.

By Mr. McManus:

Q. Is that correct, Dr. Mann? [114] A. Average manufacturing company.

The Court: I think your testimony was the normal rate of return in the industry was about 10 percent?

The Witness: That is right.

The Court: And an earned average at Champion was about 25 percent.

The Witness: That is right.

The Court: During the years in question you used.

The Witness: Right.

The Court: General Motors, an average was about 21.6.

The Witness: Right.

Q. (By Mr. McManus, continuing): Now, having ascertained these figures, do you have any conclusion that you can draw from the fact of the high profits in this industry? A. Well, I would like to draw two conclusions.

The first is that Champion's profitability coincides with what an economist would expect, given the kind of industry which Champion operates; that is, an industry with high concentration and high barriers to entry.

The Court: Wait. You said that the Champion profitability was what, was due to—

[115] A. Can be attributed to the structural characteristic of the industry, high concentration and high barriers to entry.

As I pointed out, economists have well-documented, I think, in their research that industries with these two characteristics earn rates of return which are considerably above this 10 percent average I have cited for the manufacturing sector in general.

The other aspect of this profitability comes, leads us back to the motives for vertical integration. I cited three reasons which economists generally think motivate firms to vertically integrate. One has to do with efficiency. As I read the opinion in the documents and what additional reading on the spark plug industry in the assembling of automobiles, I found no evidence to suggest to me that there are any efficiencies to be derived by combining these two operations.

However, it is clear that an automobile firm facing buying spark plugs would face a price which is considerably above the production costs of producing it, as is indicated by those profitability figures.

I don't really think, however, that the temptation is vertically integrate, to bypass that monopoly price, is the reason that you find the automobile manufacturers wanting, would want to vertically integrate. One, because the OE price, which I understand is 6 cents [116] and considerably

below the cost of producing the plug, is the major purchase of plugs for the automobile manufacturer; that the only plugs which they pay a monopoly price on would be for those plugs which they buy for replacement to distribute to their dealers, which I gather is a fairly small proportion of their purchases.

However, the circumstances in the automobile industry make it attractive to integrate to try to capture for oneself the monopoly profits that can be derived in such a repair part or tune-up part like spark plugs.

By vertically integrating, the automobile manufacturer can, instead of having those profits go to an independent manufacturer, accrue to its own treasury, and that the reason that there apparently exists this very high profitability in this significant discretion over price that the spark plug manufacturers have, at least revealed by Champion's profitability, is the great consumer insensitivity to the price which is charged to him for tune-ups or for something like the spark plug, and given this insensitivity and given the fact that an automobile, once sold, returns to service outlets in order to be repaired, tuned up, it makes economic sense from the standpoint of an automobile manufacturer, to vertically integrate, to try to capture the high rates of return that [117] can be earned through the sale of repair parts, such as spark plugs.

I might point out that the application of what I have just said to the spark plug market holds for other repair markets as well. Not all, but many. This has been well-demonstrated by Professor Robert Crandall from MIT in an article in the Journal of Industrial Economics, July 1968. The article is entitled "Vertical Integration and the Market for Repair Parts in the United States Automobile Industry."

Professor Crandall, in that paper, demonstrates in general the kind of argument which I have just made on the specifics of the spark plug market.

So it seems to me, or I would conclude that the opportunity for Ford to acquire the spark plug facilities of Autolite was a golden opportunity, if you will, to accomplish through this acquisition the high rates—to obtain the high rates of return which are obtainable through this particular market.

[118] Q. Now, Dr. Mann, have you had an opportunity to study the Judgments of both the Plaintiff and the Defendant in this case? A. Yes, I have.

Q. Now, do you have an opinion as to what effect, if any, would the judgment as proposed by Ford have in correcting the violation that we have here? A. Yes. My opinion is that it would not correct the violation. And from the standpoint of the consumer, making the economic situation worse than it is—than the status quo ante.

Q. And what do you base your opinion upon, basis; your basis for that statement? A. First, Ford now, as an owner of a facility in the spark plug business, has the economic incentive to continue to push and to maintain the O.E. replacement tie.

As I argued yesterday, this tie is an important contributor to making entry virtually impossible into the spark plug industry, even though from what I understand the efficient levels of production to be in the spark plug industry, there is room for more efficient producers, additional producers who could be efficient.

But Ford has the economic incentive to not loosen the O.E. replacement tie to try to move for an all-make concept to develop a spark plug as a [119] spark plug, but to continue to emphasize, to strengthen the O.E. replacement

tie which is a critical part and parcel of explaining the high concentration and the high barriers to entry into the spark plug industry.

So, given this incentive, it seems to me that Ford's retention of the Autolite Spark Plug facility will contribute to certainly no lessening of concentration, and no decrease in the high barriers to entry, but probably contribute to sustaining them and strengthening them.

Secondly, it would seem to me that if Ford retains the Autolite Fosteria plant, Autolite name and the Fosteria plant, that the pressures increase for Chrysler to vertically integrate with Champion, at least with respect to the spark plug facilities. The obvious motive for Chrysler is to try to get—to try to add to their treasury the high rates of return that Champion obtains through their sales through independent outlets.

If this vertical integration proceeded, it seems to me that for all intents and purposes any hope of deconcentration or reduction in barriers to entry, or a loosening of this market, would be gone, short of a revolution in—technological revolution in the making of automobile engines, which would obviate the need for spark plugs, which would then change the whole matter. But as long as present technology continues to produce the [120] kind of engines which will need spark plugs, it seems to me that the hope for any competition in that market is precluded.

Thirdly, the Ford proposal with respect to Eltra seems to me to add—have little chance or no chance, really, of adding any competitive impact in this industry.

First, Ford's decree provides that Eltra sell these 30 million plugs to Ford under the Autolite brand name. Clearly, that gives Eltra no run at the aftermarket with any name of its own, after the period of time, the decade

has ended. Eltra now finds itself, after this period of time, still faced with A.C., Champion, and Autolite, as the three brand names with which it has to contend. And it seems to me, as I've tried to argue, it does not present a very hopeful situation.

Secondly, during this period of time Ford has continued to push, to emphasize, to strengthen in whatever way it can, the O.E. replacement tie in order to strengthen its ability to share in the high profitability that comes from operating in a market with high concentration and high barriers to entry.

So Eltra finds, after ten years, that they've been supplying Ford, and after this ten years find themselves in a situation where Ford has continued to [121] behave in a way which makes it even more difficult, if not impossible, for them to do anything about it after—after the O.E. contractor relationship with Eltra can come to an end.

So it seems to me that—or it is clear to me, that the effect of Ford's decree is to remove any chance that we might be able to loosen this industry and provide opportunity for less concentration, and a reduction in the barriers to entry.

Q. Now, have you had an opportunity to look at the Plaintiff's proposed judgment? A. Yes, I have.

Q. Now, what effect, if any, would the Plaintiff's judgment have in correcting the evils of this illegal acquisition? A. In my judgment the minimum that the Plaintiff's decree would do is to restore the status quo ante. But in the present day market it improves on the status quo ante in the sense that Autolite and the Fostoria spark plug position—facility—is in a stronger economic position now than it was at the time of the merger acquisition.

Secondly, to the extent that the New Fostoria Autolite face the prospect that Ford might, after ten years or after

three years, begin to source O.E. elsewhere than New Fostoria Autolite, the new company would have to begin to face the prospect that its survival [122] depended upon its success in the aftermarket.

It seems to me, with the name Autolite, in an efficient facility, that this provides the one chance that we might have in breaking the O.E. replacement tie, to moving toward a market in which we are able to think of spark plugs not as an A.C. or Champion or an Autolite, but as a brand X; which is, as I've suggested, if it ever came about, would open the industry up considerably to the prospects of additional entry. Because the efficient level of production, although a larger percentage of total output, is not so large that entry is precluded.

And this, it seems to me, is the important character of the Plaintiff's decree; that rather than—that a chance, an opportunity is being opened up to benefit the consumer of tune-ups by possibly breaking the O.E. replacement tie, if the New Fostoria Autolite is faced with competing in the aftermarket.

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CROSS EXAMINATION

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[132] Q. In your more general studies of the relationship between market structure and profitability, did you conclude that there was such a relationship? A. Yes.

Q. Did you find that where there was a monopoly market structure, there was higher manufacturing profitability? A. Yes.

Q. Did you find that the rate of return on invested capital was higher where there was a monopoly structure? A. Yes.

Q. Did you find that the converse was true, that where there was a competitive market structure there was a lower return on invested capital? A. Yes.

Q. Would you then conclude that if the profitability ratio of profit to invested capital decreased, that that would be at least one indicia of increased competition in the industry? A. If it decreased over a period of time, that—

Q. Well, suppose it decreased over a period of, say, seven years? Would that be an indication that the profitability—I'm sorry—that the degree of competition had increased during that period? A. It could be an explanation. The level of profitability is still a critical determinant in interpreting whether a firm [133] has market power or whether it does not.

Q. You consider, do you not, that a 25 percent rate of return on investment is very high in industry, don't you? A. Yes, I do.

Q. Do you consider that a 29 percent return is very high? A. Yes.

Q. Is a 29 percent return more indicative of a monopoly structure, in your view, than a 25 percent return? A. I—it cannot be—I cannot respond as simply as that. There is no—I would not interpret the difference between a 29 and 25 percent as some sort of incremental inference of differences in market power.

There are other factors which affect profitability—demand changes, cost changes. However, a rate of return over a period of time, say a decade or more, which is persistently above the average in manufacturing, is, to my mind, and I think most any economist's mind, a clear indication that if it is earned in the presence of structural elements like high barriers to entry and high concentration, reflects considerable discretion over price.

Q. Well, would you consider—

The Court: Reflects what?

A. Considerable discretion over price.

Q. (By Mr. Shapiro, continuing): Discretion over price. [134] Would you consider that a 30 percent decline in profitability, rate of return, would be indicative of some change in the competitive structure of a market? A. No.

Q. Why not? A. Depends upon what, where it fell from. If the level is still persistently above the average in manufacturing, it means that there may be—one possible explanation is maybe less market power, but still considerable market power.

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[138] Q. So one might say that the pre-acquisition profitability ratio of Champion was 29.6 percent, and the post-acquisition profit ratio of Champion was 20.6 percent; is that correct? A. That would be it, an interpretation.

Q. Now, Dr. Mann, if you have an industry in which 75 percent is in the hands of two companies, and the third company smaller than the other two increases its share of market by one-third, would that be an increase in competition in that industry or would it not represent an increase in competition in that industry? A. I would hesitate to interpret that as an increase in competition without more knowledge about the industry. Because a simple rearrangement of market shares among oligopolies does not indicate to me that there's more competition, if you define "more competition" as increased pressure on price to force it toward the production cost plus the opportunity cost of capital.

Q. Well, let me be more specific.

Do you know approximately the market share of Champion in the spark plug industry in the year 1960? A. I've

seen—I've seen the date. I don't have it. If my memory serve me correctly, it was over 40 percent. I mean between 40 and 45.

Q. Well, let's use the figure of 40 percent as a close enough [139] figure.

Do you know the approximate share of market that A. C. had in the year 1960? A. Again, I would—my memory serves me, around 35.

Q. Do you know what the share of market of the Electric Autolite Company was in the year 1960? A. It was about 12 to 15.

Q. Do you know whether it was closer to 12, or closer to 15? A. I'm sorry, I don't recall.

Q. Shall we strike a medium and call it thirteen and a half? A. Sure.

Q. Or 14, or what should we use? A. Use 14 if you wish.

Q. All right, we will use 14.

So there's a total that three companies had of approximately 90 percent; is that correct? A. That would be correct.

Q. Now, if the 14 percent share becomes 19 percent over a period of seven or eight years, would that reflect in the spark plug industry an increase in competition or would it not?

The Court: Read that—will you state that question again?

Mr. Shapiro: I'll state it again, your Honor.

[140] Q. (By Mr. Shapiro, continuing): If the 14 percent share that we have attributed to Autolite in 1960 became 19 percent by 1969, would that, in the spark plug industry, represent to you an increase in competition or not, in that industry? A. In a very limited sense. I would need—want to know more than simply the fact that there's been a slight

rearrangement of market shares among the three companies that dominate the spark plug industry.

Q. Well, do you not know enough about the spark plug industry to make that kind of an evaluation? A. Yes, I can make that evaluation.

I would say that has not been an increase in competition.

Q. Well, now, on what do you base that statement? A. Because, at least as I interpret rates of return earned by Champion, Champion still earns, over the period of time where this market share increase was occurring, a rate of return twice the average in manufacturing, and, in fact, a rate of return which is comparable to the rate of return earned by most firms which I have studied which operate in highly concentrated industries with high barriers to entry. The 20.3 I think, for an average, doesn't differ very much from General Motors' 21.

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[141] Q. (By Mr. Shapiro, continuing): Well, now, my question, Dr. Mann, wasn't whether the industry had achieved a norm; my question was whether there was any change in the complexion of competition between the time when there was a 40-35-13 split, and a 29.6 profit ratio for Champion, and the time when the 14 had become 19 and the rate of return had dropped 30 percent, to 20.6 percent. Is that an increase in competition; not a return to norm, but an increase in competition in your view? A. No. I do not consider that a rearrangement of market shares among three firms which have—which dominate an industry as an index of competition at all. The change in Champion's rate of return, the 30 percent decline to which you refer, can be explainable by other hypotheses other than prices are dropping for spark plugs, which is what I would consider an important index that competition was increasing.

[142] Q. Well, let me ask you, do you consider the spark plug business to be a competitive industry or not? A. No.

Q. Do you consider it to be a monopoly industry? A. No.

Q. Do you consider it to be an oligopolistic industry? A. Yes.

Q. You testified that Ford in 1960 was not paying to Champion a monopolistic price, is that correct? A. That's not quite correct. What I said is that for is O.E. purchases it was not paying a monopolistic price. That for the plugs which it bought for replacement to sell to its dealers, they were paying a monopolistic price or an oligopolistic price; a price substantially different from a competitive price.

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[144] Q. I'm talking about the price to Ford. Was that price, how did that price relate to Champion's cost? I'm talking about the average price, the 23 cent price, do you know? A. I don't know what the average unit cost is. I have to make that inference from the profitability figure since getting data on specific unit costs for a firm is virtually impossible.

Q. Isn't it a function of an oligopolostic position that the oligopolist has substantial control over the price he charges? A. That is correct.

Q. Well, doesn't that mean that Champion would have had substantial control over the price he charged Ford? A. Yes, qualified.

Q. Well, what, as an economist, do you conclude would cause an oligopolist to charge its customer a price below its cost for a substantial amount of its merchandise? A. Threat of entry.

The Court: What?

A. Threat of entry. That is that, and this is why economists have come to look at barriers to entry as well as concentration because a market that is highly concentrated would not necessarily mean oligopolistic control of her price if entry into that market was very easy. The only entry that the spark plug manufacturers face that is at [145] all realistic, is the possibility that the automobile manufacturers would enter the spark plug, build de novo facilities to supply themselves. The 6-cent price, it would seem to me, reflects the simple understanding of this on the part of Champion and Autolite preacquisition.

Q. Does it represent anything to you in connection with the O.E. tie that you have testified about? A. Of course, because to maintain, since O.E. contracts are the sine qua non of success in the aftermarket, and since it is obvious that there is a tremendous amount of, a very high rate of return to be earned in selling in that aftermarket, it would make economic sense to try to forestall entry by the automobile manufacturers in order to tie, to emphasize this O.E. replacement tie.

Q. Isn't it in order to get advantage of the O.E. replacement tie? A. Well, I don't know whether to get advantage of it to make concessions so not to lose it.

Q. Yes, but the O.E. replacement tie, as I understand your testimony, gave Champion an opportunity to sell a lot of plugs in the replacement market at the 35 cent price; isn't that correct? A. That's right.

Q. So that the 6 cent price to Ford was a way of developing that expectation, isn't that correct? [146] A. Yes.

Q. So Champion was giving something to Ford in order to get something in the indenpendent aftermarket, isn't that true? A. Right.

Q. Now in the ordinary vertical integration case that you talk about where the purchaser wants to capture a

profit on the resale of the product, he is trying to take something that now belongs to his supplier, isn't that correct? A. Right.

Q. Wasn't Ford—

The Court; Just a minute. Please read that question and answer.

(Whereupon the record was read.)

Q. (By Mr. Shapiro, continuing): Well, in the spark plug situation, isn't it true that integration by an automobile company is in a sense a taking back of something that has previously been sold to a supplier for the 6 cent price? A. I'm not sure I understand what you are asking. You are suggesting, if I understand correctly, that the vertical integration means that now Ford or the automobile manufacturer will essentially have to pay the cost of production of spark plugs rather than 6 cents?

Q. Yes. A. But the rate of return of Champion makes it very clear that the opportunities for profitability are so good that what [147] one loses in the 6 cent price is more than made up. The fact that Champion can earn 25 percent over a 16 year period of time, despite selling some of its output at a unit loss suggests to me that the prices on replacement plugs are considerably above—

The Court: Considerably what?

A. Considerably above the costs of production and distribution including the opportunity cost of capital.

Q. (By Mr. Shapiro, continuing): Assuming that is true, isn't there an anti-competitive effect in a transfer of that profit from Champion to Ford, from a competitive standpoint? A. Yes.

Q. Explain that, please. A. And that's that Ford now has an incentive to continue to add to, sustain, maintain this O.E. replacement tie.

Q. Well, did Champion not have that same incentive in 1960 as Ford's supplier? A. Certainly.

Q. Was Champion able to maintain that and do that as well as Ford can? A. Apparently they have been very successful.

Q. Now let me repeat my question. What do you see is the anti-competitive effect of transferring the manufacturing profit from Champion to Ford? A. Well, I would still argue that by transferring that profit [148] you have put Ford in the position of having a direct economic stake in maintaining the O.E. replacement tie. Champion has such a stake as an independent supplier clearly but once a manufacturer has gotten into this market, the incentive is to increase it, to expand it, to sustain it so that it's more than a simple transferral. The economic incentive before the manufacturer becomes even stronger.

Q. Let's take a look at the O.E. tie. You say that the O.E. tie is the sine qua non of a successful operation in the spark plug aftermarket, is that correct? A. Yes.

Q. If the O.E. replacement tie is the sine qua non of successful operation in the spark plug aftermarket, there must exist from some customer level a demand for O.E.; is that correct? A. Sure. Yes.

[149] Q. Do you accept the Court's finding in this case that this demand for an O.E. tie occurs principally at the mechanic-installer level? A. Yes.

Q. Well, doesn't it follow, then, that for a spark plug manufacturer to be successful in the spark plug aftermarket, he must either supply the O.E. in response to the demand or change the complexion of the demand? A. Correct.

Q. If a spark plug supplier is unable to supply the O.E. demand because he doesn't have it, his only alternative to success would be to change it; is that correct? A. That is correct.

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Q. (By Mr. Shapiro, continuing): If a spark plug supplier desired to change the O.E. demand in order to be successful, what would be his way in the spark plug industry of going about it? A. Well, it would seem to me that what he has to do is convince the mechanics and the feedback through the jobbers and wholesalers that the argument of the automobile manufacturers that only factory-authorized spark plugs have to go into [150] serve as replacement for O.E. is incorrect and that I, as a manufacturer, can duplicate, in terms of quality and in terms of distribution opportunities, everything that is offered, but mainly brake this preference that appears to exist of the mechanic for only replacing the O.E.

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[155] Q. Well, if the Government's proposal were adopted would you consider that there would be change in attitude toward the O-E concept? A. No.

Q. Would you consider that there would be any change in attitude toward the O.E. concept on the part of Champion? A. No.

Q. Well, wouldn't it be true, then, that under the Government's proposal, in order to achieve sales success through convincing the mechanic away from the O.E. concept, he would have to succeed against the efforts of A.C. and Champion? A. That's correct.

Q. Now, the Government's proposal provides for a sliding scale of O.E. requirements on Ford's part. Do you recall that? A. Yes.

Q. Now, hypothetically speaking, Dr. Mann, in the event that the new Fostoria did not succeed against the A.C. and Champion effort in weaning the mechanic away from the O.E. concept, that that declining scale would represent a declining success curve? A. Given your premise, the "if," that's correct.

Q. And therefore, success after 1980 would be zero, isn't that correct? A. That's correct.

The Court: Well, now, read the last two [156] questions and answers, please.

(Whereupon the record was read, by the reporter.)

Q. (By Mr. Shapiro, continuing): Now, if my premise is correct, that the new Fostoria did not succeed in weaning mechanics away from the O.E. concept, against the efforts of Champion and A.C., and therefore failed by 1981, who is your opinion, Dr. Mann, in the spark plug industry, would take over that business under the Government's proposal? A. Champion and A.C.

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[161] Q. Well, if I were to tell you that the warehouse distributors' margin is very narrow and that the retailers' margin is very broad, would that have any effect on your view as to how a decrease in the warehouse distributor price could be passed on through the jobber chain to the retailer in any significant way? A. If the wholesalers' margin is very narrow and the wholesale price for the plug is cut, it would seem to me that that would have a greater percentage impact on his margin than the subsequent cut in price from the jobber to the retailer, and given, as I interpret the profitability of Champion, there is certainly a lot of room for experimenting with price cutting at the wholesale level.

Q. What would the way be that the warehouse distributor could be persuaded to pass on to the jobber the benefit it got from a reduced warehouse distributor price? A. I suppose the way would be to tell the jobber that the expanded margin reflected the belief in the fact that the Autolite plug was the equal to its competitors, that the jobber will participate in an expansion of the market if this promotional campaign

is successful, and that therefore he would hit an economic interest in sharing in the expansion of Autolite plugs in the market.

Q. You testified today that there was an insensitivity to price in the sale of tune-ups. Would you explain that? A. Well, this, I—well, what I mean from this, and this I took [162] or read in one of the documents submitted by Eltra, but the common-sense reasoning is that once a consumer has purchased a new automobile, which may run into thousands of dollars, he is anxious that he receive good servicing and dependable repair work in maintaining this vehicle on the road.

Since going in for a tune-up, the total price of a tune-up, to keep an engine running, is small relative to the outlay that had been made on this new vehicle, and the fact that the total outlay, barring some major engine overhaul, but a total tune-up outlay is not exorbitant, at least for middle-income and above people, that the consumer would be less responsive—that is, you doubled the price of spark plugs, for instance, in a tune-up package, or even separately, I would think it unlikely that many consumers would cease going to the particular service area that had done that tune-up. Some price-sensitive consumers might move, but by the "insensitivity" I mean the average or the consumer would not shift with such a price change.

Q. Do you know what is in the tune-up package? A. No, not exactly. I think the plugs and points—I'm trying to remember when I had tune-ups on my own automobile what I have been charged for. It shows my insensitivity to it.

Q. Well, in any event, there are parts other than spark plugs in the tune-up, is that right? A. Yes, that would be my understanding.

Q. And there is also a labor charge in the tune-up, isn't that [163] right? A. Correct.

Q. Do you have any idea, either from your own personal experience or from anything you read, as to what the tune-up package would ordinarily cost, in total? A. My experience suggests to me $20.00 to $30.00, that range.

Q. On a six-cylinder car, what proportion of that would you say would be involved in the spark plug part of the tune-up? A. A small portion.

Q. Well, isn't that the reason for the so-called insensitivity to price in the purchase of a tune-up? A. Yes, that is certainly a key element.

Q. Isn't the tune-up the typical way in which the retail service outlet sells spark plugs? A. Yes.

Q. Isn't it ordinarily the only way? A. I would—yes, I would suppose so. I don't—someone might be able to find examples of—

Q. Does the service station ordinarily break down on its invoice the cost of the specific parts and the cost of the labor? A. That has been my experience.

Q. Do you know whether there are some retail service operations that don't do that? A. I don't know.

Q. Did you ever study the spark plug price on your invoice? A. I have looked at it, yes.

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[169] Q. (By Mr. Shapiro, continuing): Dr. Mann, this photograph, as you will see, and as the Judge will see when we hand it to him, shows spark plugs advertised at the Merchandise Mart; A. C., Champion, Autolite for 54 cents. Would you just look at that and pass it on to the Judge.

Dr. Mann, if I were to tell you that [170] that was a typical situation in the spark plug aftermarket, and that that was typical of approximately a 30 percent segment of the aftermarket; would that tell you anything about the state of competition among Champion, Autolite, and

A. C. spark plugs? A. Well, it would tell me that they are trying to reach the consumer who installs himself and do it through offering an attractive price. They, however, are still pushing the plugs by their brand names which I would interpret as meaning the hope that they are convincing the self-installer of a virtue of the O.E. replacement tie that if these plugs were, in fact, being marketed as Brand X rather than by brand name, I would take it as a—if 30 percent of the replacement market was attributable to Brand X rather than to A.C., Champion and Autolite, I would take it as a healthier sign because it would look as if there is a market growing for which there will be room for an independent entrant to make it into the market. But, as I read this, I see nothing which suggests to me that A.C., Champion or Autolite is trying to break the O.E. replacement tie through this kind of marketing, but simply trying to reach the consumer who will self-install.

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[172] Q. Well, if there is an abundance of something to the point where the price is substantially less than half of the suggested retail price of the manufacturer, does that kind of condition ordinarily characterize an oligopolistic market? A. It might.

Q. I said ordinarily. A. It depends upon whether the oligopolies find segmented [173] markets in which to compete. It's queer that in this market there is a group of self installers, a much larger percentage than I believed to be the case, which the oligopolies feel they can reach through marketing via mass merchandisers. But the lower price, the fact that there's a lower price through mass merchandisers than is the case through the tune-up mechanic installed distributor, does not necessarily connote any pres-

ent competition. If it were, I can't explain Champion's fantastic profitability.

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[174] Q. (By Mr. Shapiro, continuing): Do you know whether Ford [175] Motor Company has a different economic incentive to sell into the independent aftermarket Ford O.E. replacement spark plugs from its incentive to sell replacement spark plugs that are non-O.E. in their application? A. It would seem to me that they could have conflicting motives to some extent. First, it is clear that the more that they can sell, the better it is for the company and for their spark plug business.

However, it is important as well to not lose the O.E. replacement tie in any selling effort that is made, not go so far as to begin to shake this invention. Because as I suggested earlier, if it came about that spark plugs to the mechanic became homogenous as far as he was concerned, that he became indifferent between the sellers from whom he received these, then as I understand what the efficiencies of the spark plug industry to be, there would be room for a lot more producers in that industry than there are now.

So that to push too hard on the—to push too hard, sales that might begin to break the O.E. replacement tie, might lessen the barriers to entry considerably and open the market up to increased competition; new entry.

Q. Well, now, didn't you testify that a new entrant would need somewhere between 50 and 70 million spark plugs in volume in order to enter the market? A. That's my understanding of what efficient levels would require.

[176] Q. Well, now, what kind of distribution system would an entrant need in order to be able to achieve, quickly, a 50 to 70 million spark plug volume? A. Well, his problem

is that he cannot go to the existing distribution system, because the existing distribution system is tied to the O.E. replacement concept, as well as, I would imagine, in the case of distributors carrying large numbers of auto parts, tied in with respect to other parts areas where O.E. replacement or other specialized parts require dependence upon the particular part or particular model car in a particular year. So that a new entrant now would have to enter within his own distribution system. In a sense, to vertically integrate or to create his own distribution system to reach filling stations, mass merchandisers and other outlets for plugs.

Q. Well, entirely apart from the O.E. tie, wouldn't the efficiency level of manufacturing be an effective barrier to entry in the spark plug industry?

The Court: Wouldn't what be?

Q. (By Mr. Shapiro, continuing): Wouldn't the efficiency requirement of 50 to 70 million of volume be an effective barrier to entry by a spark plug manufacturer, as the industry is presently structured? A. Well, it is a barrier to entry, but its importance is much greater in the present structure of the market than would be the case if spark plugs were all a brand X. It is true that [177] if we want efficient production there is, according to this estimate of 50 to 70 million, only room for nine to ten producers. But nine to ten is, in my judgment, a sufficiently large number to bring about rates of return which are—which would be less than those which I observed for Champion over this 16-year period.

Q. Well, now, in order to—in order for a new entrant to enter, would he not at the same time have to enter a market in which the O.E. tie did not exist, and in which he

would also have a distribution facility that could handle 50 to 70 million spark plugs per year? A. I see no reason, if there's no O.E. tie and no brand name market segmentation against which he has to compete, why he needs to have a distribution system. Since I presume the distribution system would be there and his efforts would be entirely upon persuading existing distributors to push the plugs through.

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[180] Q. Now, that is what I would like to know. Would he approach existing warehouses to try to get them to accept a particular order for spark plugs, or would he approach an existing warehouse distributor and ask him to shift his total allegiance for spark plugs from one manufacturer of spark plugs to him? A. I suppose he would like to accomplish the latter.

Q. All right. Now, what inducement could this man offer the warehouse distributor to induce him to shift from A.C. or Champion or, if Ford were still selling Autolite, from Autolite? A. Assuming that the plug was of equal quality, so we don't presume it is of superior quality in some sense, he could cut price.

Q. You believe that a price cut would enable a spark plug manufacturer to obtain a warehouse distributor from one of the major spark plug manufacturers; is that your testimony? A. It would be a step toward encouraging the warehouse man to think seriously, since his margin would be widened.

Q. Well, assuming he thought seriously, what would be the chances of his deciding to change from A.C., Champion or Autolite to a non-original equipment brand, in your view. [181] A. The chances might be quite high if it weren't for the O.E. replacement tie which he faces further on with respect to mechanic resistance to taking Brand X from him.

Q. Well, then, in the sequence of events, the mechanic would have to be transformed in attitude before the warehouse distribution system could be built up by the new entrant; is that correct? A. That certainly is a key locus to the market, yes.

Q. Now, you testified this morning that Ford has moved to strengthen the O.E. tie since the acquisition. Can you explain the basis upon which you made that statement? A. If I stated it that certainly, I overstated it. I would say that would be my expectation, that this is now Ford's economic interest. Certainly—and my casual viewing of the FBI suggests to me that Ford is certainly attempting to associate Ford and Autolite together in a package of names, suggesting to the buyer of plugs and other kinds of parts that if you own a Ford, it makes sense to use Autolite parts.

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[184] Q. Well, Dr. Mann, not to pursue this at too great length, but if it should turn out in the record on this hearing, after examination and cross examination of witnesses who know, that Ford has made a sincere effort, at great expense, to promote the all-make brand, the Autolite brand as an all-make brand of spark plug, exceeding its effort to promote it as an O.E. brand of spark plug, would that change your view as to the necessity or desirability of the Government's proposal? A. No, because no matter how much Ford has done in this regard, the incentive to keep the part and the vehicle tied together through O.E. and replacement in this particular market is [185] a strong incentive, and an incentive which I find it inconceivable that Ford would abandon over time because, as Champion's profit figures suggest, the economic stakes in being successful in making this tie are impressive.

Q. Well, once a spark plug manufacturer has been established in the aftermarket through a massive distribution chain, doesn't his economic incentive shift to seeking to sell more spark plugs than he sold before, whether they are O.E. or not? A. Ford certainly has that incentive, but they also have an incentive to maintain, at least, and maintain and sustain, and if they could succeed, encourage the O.E. replacement tie. If Ford, for instance, it were possible to move Autolite's share in the aftermarket up to the 25 percent of the market they hold with respect to passenger cars, and this could be done through emphasizing an O.E. replacement, they could succeed in this way, it seems to me that this would be the logical direction for Ford to move in.

Apparently, to move in that direction entirely has difficulties which makes economic sense for it to try to capture some of the aftermarket on the all-make concept, but I certainly would be surprised to see Ford abandon any attempt at communicating the idea that the parts Ford makes are genuine, authorized [186] factory parts that are the ones that should go back in the Fords and not other competing manufacturers' parts.

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[198] Q. (By Mr. Shapiro, continuing): Dr. Mann, in the event that the Government proposal were to be put into effect, what would you anticipate Ford's requirements for spark plugs would be? A. Ford's requirements would be its O.E., plus replacement for its dealers. That would be it.

Q. In terms of number of plugs, do you have any figure in mind as to what that might be? A. You gave me the figures this morning in another question. It would be some where around 50 million plugs? I don't recall the exact figure; you told me this morning what the two, O.E. plus the replacement, and the number has slipped my mind.

Q. I don't believe I did. A. Oh, I'm sorry. I thought—

Q. But really what I am asking is: When you addressed yourself to the Government proposal from an economic viewpoint as a consultant, what did you conclude that the Ford requirements would be in terms of number of spark plugs? A. I did not arrive at a specific figure.

Q. The requirements would be substantially less than they are today, isn't that true? A. Yes.

Q. Indeed, all of Ford Motor Company sales into the independent [199] aftermarket would not be included in the requirement; isn't that true? A. That is correct.

Q. Now, what would it be your anticipation would happen to that segment of Ford Motor Company's current business? A. That the new Fostoria Autolite would attempt to maintain that part of the business; that is, to continue to distribute through the existing distributors which have been built up or added to or expanded in the last few years or the year subsequent to the acquisition, pushing, I would expect, the idea that the Autolite name represents quality for many years, that it is O.E. in Ford's for the past several years and will be for some additional years, and attempt, you know, to maintain these distributors in this fashion.

Q. If New Fostoria did not succeed with respect to any distributor or group of distributors, what would happen to the business that was now going through that distributor? A. Well, that business would be lost to New Fostoria. The distributor might no longer distribute or he might turn to another source.

Q. What other source would he turn to? A. In all probability, Champion and A.C.

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[203] Q. Well, Dr. Mann, would Ford's continuing sourcing to the new Fostoria under the Autolite brand beyond the 10-year period be consistent with the government's objectives in this case? A. Yes. At the minimum, as I earlier suggested, it would simply be to restore, in a sense, the status quo ante. And the importance of having established the status quo ante is, one, that it removes from Ford one kind of economic center about which I have spoken, the attempt to re-inforce, to carry the OE replacement tie, and secondly, it at least puts Ford and Chrysler in the position of not being dependent on a single source of supply for plugs.

Q. Wouldn't the new Fostoria have the same motivation with respect to the OE preference as Champion does, if it saw a continued future as original equipment on Ford Motor Company vehicles? A. It would have the same incentive.

Q. You wouldn't break the OE tie, would you, if the new Fostoria saw itself as a continued Ford supplier of original equipment spark plugs? [204] A. No. It would certainly be in the New Fostoria's interest to maintain that tie.

Q. From an economic standpoint would you consider it desirable that Ford not re-enter the manufacturing of spark plugs at the end of the 10-year period? A. Well, since my presumption is that an increase in the number of sellers is the generally desirable—as long as it's consistent with efficient sales character—characteristic of a market, competition, my answer to that would be no.

Q. You would think it was desirable that Ford re-enter the manufacture? A. Yes. I could see that having desirable impact.

Q. So you eventually envision A.C., Champion, Ford and New Fostoria as the major producers in the market.

A. Well, I'm not—as I said earlier, I'm not convinced that Ford would in fact re-enter.

Q. No, I am talking about— A. So I would not be upset if they did.

Q. Do you think it would be desirable, from an economist's standpoint, that Ford did or did not take advantage of the declining—of the increasing opportunity to source outside and develop a new name? A. I would think that this could have a beneficial effect, because it would mean that Autolite would be faced with the prospect of losing an OE, an association, and therefore its viability would depend upon successfully pushing an all-make [205] to depending entirely, virtually entirely on aftermarket sales for its viability. And to the extent that it increases the homogenuity of plugs, that it can make the all-make concept go, this, as I argued earlier, is the only chance that I foresee for any possibility of reducing the barriers to entry and deconcentrating that market.

Q. Would it be within the interest of the New Fostoria to promote the OE concept for the first four years of Government's proposal? A. I would expect so, yes.

Q. Wouldn't it also be desirable for the New Fostoria to promote the OE concept during the fifth and sixth years of the Government's proposal? A. I would expect so, yes.

Q. Now, if Ford were to enter a new OE brand commencing in the fourth year of the Government's proposal, would it not be within Ford's economic interest to press the OE concept? A. Certainly.

Q. And that economic incentive in Ford would continue through the seventh year of the Government's proposal; is that correct? A. Yes.

Q. In fact, it would obviously continue through the rest of the ten years in the Government's proposal. A. Yes.

Q. So that the first seven years of the Government's proposal there would be the economic incentive for Champion, A.C., [206] Ford, and the New Fostoria to promote the OE concept; isn't that correct? A. That's correct.

Q. Now, at what point would the New Fostoria have an opportunity to persuade a warehouse distributor, with that contemplation, that the OE concept could be reversed by 1980? A. Well, in the fourth year, if Ford in fact shifted, at that time, and/or if New Fostoria had any inkling that that shift was going to come about before the fourth year, and if the New Fostoria Autolite had not succeeded in winning some OE from Chrysler, that at that point it would seem to me the time when it would begin, if not earlier, to prepare the way for loosening the OE replacement tie, to seek out mass merchandisers, private brands, national account markets et cetera.

Q. What year of the plan would that be? A. Well, I—the fourth, most clearly, unless New Fostoria Autolite had some inkling before that time that Ford was going to shift. But the fourth year would be clear; it would be clear that Ford would either shift or it didn't in the fourth year. If it shifted, then at that point, it would seem to me.

Q. Well, then, if Ford shifted, then in the fifth year the New Fostoria would have to overcome the OE preference at the mechanic level against Champion, A.E. and Ford; is that correct? A. That's correct.

[207] Q. Do you, Dr. Mann, contemplate that under the Government's plan Eltra can survive the 10-year period? A. I don't think Eltra's position is very strong.

Q. Do you think that probably Eltra would disappear as a major factor on the spark plug scene by the year, say, 1980? A. Yes.

Q. Do you know how many plants Eltra has for the

manufacture of spark plugs? A. Again, I've seen the figures—one or two, I'm not—

Q. Well, I was under that impression when I made my opening statement. I am told that there are three; there is one in Sarnia, Ontario, one in Decatur, Alabama, and one in Reading, Pennsylvania. And it would be your view, would it, that all three of those plants certainly could not survive? A. That would be my conjecture.

Q. Indeed, it would have to follow, from your earlier testimony, that the two in Decatur, Alabama and Reading, Pennsylvania at the least would not survive? A. Yes.

Q. In your view would the Government's proposal for divestiture of the Fostoria plant be feasible without divestiture of the name "Autolite"?

The Court: Excuse me. I just lost part of that question. Could you—

Mr. Shapiro: I'll withdraw that question.

Q. (By Mr. Shapiro, continuing): In your view, Dr. Mann, would [208] the provisions of the Government's plan for divestiture of the Fostoria plant be feasible without divestiture of the Autolite name? A. No. Because I think that in the existing pattern of the market, the Autolite name would be key to the firm's viability, particularly if it faced Ford sourcing, the prospect of Ford sourcing OE other than at Fostoria.

Q. Would the Government's plan, in your view, succeed if there were divestiture of the Fostoria plant and the Autolite name, but no prohibition against Ford manufacturing for ten years? A. No. Because I think that again, given the pattern of the market, that the New Fostoria Autolite needs some additional time to provide the springboard for the possibility that it may have to compete in the aftermarket without an OE contract.

Q. In your view would the Government's plan be feasible if there were divestiture of the Fostoria plant and divestiture of the name, and a prohibition against manufacture for ten years, but no declining requirements contract? A. I think the vantage of the declining requirements contract is that if Ford chooses to go to source OE other than Fostoria Autolite, it gives Fostoria Autolite a period of time in which to readjust. If there were a hundred percent requirements for ten years, Ford could make the decision the eleventh year, which would be—which would be the total. On the other hand, Fostoria Autolite would have that ten years running.

I find it far, to make a net—

[209] Q. Would the Government's plan be feasible in your view if there were divestiture of the plant, divestiture of the name, a prohibition against manufacture for ten years but no requirements contract at all? A. No, I think the requirement contract is necessary, again, to give the independent Fostoria-Autolite a beginning foundation from which it might have to make a change which would counter a persistent pattern of operation in the market, the O.E. replacement tie.

Q. Do you believe the Autolite name would be of any value to the New Fostoria in seeking private label business? A. I would think so, since the Autolite name carries with it the reputation of a part maker who has produced parts for a long number of years of quality and satisfactory service. So it would seem to me that, although a private brand might want to put their own private brand on, the fact that it was, the Fostoria-Autolite Company was seeking them out as opposed to some company with whom they have had little or no experience, or has not had a successful past record of business success, then I would conjecture this would help.

Q. Do you know whether Eltra has the reputation in the field of being a spark plug producer of quality over many years? A. I am not sure that—my impression is that it does have a good reputation.

[210] Q. Dr. Mann, what would happen to Eltra's present spark plug business if Eltra did not survive, who would that go to? A. What would happen to the plants if they found that they had no customers?

Q. No, who would get that business; would it be Champion, A.C., or the New Fostoria? A. I don't see how I could predict beforehand which firm would pick up the accounts that Eltra has now.

Q. Well, suppose I were to tell you that Champion and Eltra are now competing with each other as two major competitors for private label business in the spark plug aftermarket; would that help you in reaching some conclusion as to which company would take over Eltra's business, if it went out? A. It could be Champion or the new Fostoria Autolite. I'm assuming A.C. doesn't—

Q. Do you know what incentive the new Fostoria could offer a private label account that could not be matched or beaten by Champion? A. Not offhand. I would assume that they would compete as Eltra and Champion now do, trying to win those accounts with whatever merits they offer with respect to the parts or price.

Q. Wouldn't Champion be able to offer an account a lower price than the new Fostoria with its economies of scale? [211] A. Well, if Fostoria can maintain production levels in excess of 70 million or so, I don't see why Fostoria would be less efficiently run than the Champion plant.

Q. Do you think that volume has any relationship to cost of production in the spark plug business? A. Sure.

Q. Well, if a spark plug company has a substantially larger volume of spark plug business than another company, wouldn't its cost likely be lower? A. Depending on tightly the capacity of the plant is being utilized.

Q. Assuming an efficient well run experienced company like Champion, wouldn't its cost be likely to be lower than another company in the same industry whose volume is less? A. Only, again, assuming equal efficiency of plants, assuming Champion wasn't pressing the capacity of that plant to meet its demand and operation by bringing standby equipment into existence and this sort of thing, I would expect at least some range in which volume would make a difference.

Q. Do you believe that the New Fostoria could underprice Champion, if Champion wanted to meet New Fostoria's price at any market level? A. Well, I have no reason to believe that a Fostoria that is [212] not producing well above the break even point, which I understand to be 70 million plugs, would not be able to cut price along with Champion to meet price.

Q. Do you believe that Champion would have the capability to price New Fostoria out of the spark plug market, if New Fostoria did not capture a substantial part of the business that Ford Motor Company now has in the independent aftermarket? A. Champion would be in a position, on that supposition, to charge prices lower than New Fostoria and probably make money while New Fostoria would be hard pressed.

Q. And wouldn't Champion have an economic incentive to do exactly that if the Autolite name were divested by Ford and a substantial segment of the aftermarket were lost by New Fostoria to Champion and A.C.? A. I don't think so. It has not been common in my study of oligopolis-

tic industries to see firms try to win market share by cutting prices, one with respect to the other. Certainly if Champion cut prices it's unclear whether this would cause a reaction on the part of A.C., if there were any spillover effects from this kind of price cutting. But it seems to me that oligopolies try to win market shares from each other, other than by methods of using price as a means of competing.

Q. I am not talking now, Dr. Mann, about increasing market [213] share at the expense of another company. I'm talking about consideration by a three company oligopoly looking toward becoming a duopoly. I'm talking about the elimination of a third company. Would it not be to Champion's and A.C.'s economic interest to price New Fostoria out of the spark plug market? A. I don't see why because it's not clear to me that the price result with two as opposed to three is that substantially different if their economic interests coincide. It would be a very costly process for Champion and A.C. to cut prices to drive Fostoria-Autolite out. It would take time. They would have to compare the losses from doing this against the profits that could be made up in raising prices at a later date. It's a very unstable way of doing business in this kind of market, and you don't find oligopolists resorting to this very frequently.

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[219] The Witness: If I may, Mr. Shapiro, I would like to amend one part, one aspect of my testimony yesterday that occurred late in the afternoon and I was tired at that time and not thinking of every aspect, which I would like to comment on.

The particular testimony involved your question, whether, under the Government plan, I would conjecture that Eltra's future looked quite bleak, and I

answered, "Yes" and, in fact, gave the expectation that I would expect Eltra to not survive under the Government plan.

I would like to amend that testimony in the following way: if it occurred that Ford, in the fourth year of the Government's decree, decided to source [220] its O.E., begin to source its O.E. elsewhere and the New Fostoria Autolite reacted to this by attempting to see its future becoming more and more dependent entirely in the aftermarket and began to push strongly the all-make concept and was successful at so doing, then I would consider Eltra's future to be brighter than would be the case under the supposition which I was testifying yesterday, and that is that Ford might well continue to O.E. with the New Fostoria Autolite or that the New Fostoria Autolite would find that Chrysler, for instance, had shifted O.E. to it.

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[257] Q. The New Fostoria would have an economic incentive, would it not, to preserve the association of the trademark Autolite and the Ford Motor Company, is that correct? A. That is correct.

Q. Indeed, it would use that association of the trademark with Ford Motor Company for the promotion of spark plugs manufactured by it which it sold under the name Autolite, isn't that correct? A. That is correct.

Q. Now would the New Fostoria under the Government decree, proposed decree, be permitted to sell electrical service [258] parts and batteries under the name Autolite? A. I'm sorry, I would have to have the question repeated.

Q. Under the Government's proposed decree, would the New Fostoria have the right to sell electrical service parts

and batteries, as well as spark plugs, under the trademark Autolite? A. Yes.

Q. It would have that right immediately, would it not? A. Yes.

Q. Would the New Fostoria be under any inhibition as to where it could obtain electrical service parts and batteries for sale under the trademark Autolite? A. I'm not sure I understand your question. Are you suggesting they could source outside their own manufacturing?

Q. Yes, that is my question. A. Yes.

Q. They could go, for example, to a company like Fifko and purchase a line of electrical service parts to resell under the Autolite trademark, could they not? A. Yes, as far as I know.

Q. And they could go to any battery manufacturer in the United States and purchase batteries for resale under the trademark Autolite, could they not? A. Yes.

Q. Now in your view, if the New Fostoria were tomorrow to sell [259] into the independent aftermarket a line of electrical service parts, batteries and spark plugs, all under the trademark Autolite; would not the people in the market place, other than the immediate purchaser from New Fostoria, be under the impression that the entire line was manufactured or approved by the Ford Motor Company? A. I would expect that to be the case.

Q. Now suppose that a jobber, handling such a line, were to sell that line to a Ford dealer and the dealer were then to resell that line to some customer of its own; would that customer be likely to believe that the Autolite parts purchased from a Ford dealer were manufactured or approved by Ford Motor Company? A. I would expect that to be the case.

Q. Would that, in your view, enable the New Fostoria

to trade in electrical service parts and batteries on the name and reputation of the Ford Motor Company? A. Yes.

Q. Would that result, in your view, in the confusion of customers in the market place? A. It could.

[260] Q. In the event that the quality of the parts merchandised by new Fostoria under the name "Autolite" were ever a poor quality, would that not have an adverse effect upon the reputation and goodwill of Ford Motor Company? A. It would, as long as customers associated the two names together.

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REDIRECT EXAMINATION

By Mr. McManus:

[271] Q. Now, Dr. Mann, I show you Government's Exhibit GR-1.

Now, there was some testimony here that after the acquisition of the Autolite facilities by Ford, that for a period of time Champion's return had decreased.

Starting with the period 1963, or the last five years, what rate of return or in which direction [272] has Champion's rate of return gone? A. It has gone up, risen.

Q. And for the year 1968 it is approximately the same as it was for the year 1963, the year just prior to the merger; is that correct?

The Court: 1963?

The Witness: 19—

Mr. McManus: '68—excuse me. 1960, the year prior to the merger. I'm sorry.

A. Yes, they are virtually identical.

Q. (By Mr. McManus, continuing): And those percentages are almost a little over 20 percent in that return, is that correct? A. That is correct.

Q. Is your opinion that is considerably higher or more than double than what a normal manufacturing company would expect to earn; is that correct? A. That is correct.

Q. Now, Mr. Shapiro made a statement that 30 percent of spark plugs are purchased over the counter. Do you recall that one? A. I do.

Q. Do you know approximately how many spark plugs were sold in the United States last year?

The Court: Excuse me a minute. What I still want the figure you quoted there?

Mr. McManus: The figure was, that Mr. Shapiro had stated, that 30 percent of all spark plugs are sold over the counter, apparently for self installation, I gather.

Q. (By Mr. McManus, continuing): And I then asked you, do you know approximately how many spark plugs were sold last year.

The Court: You mean 1969, now, or what year?

Mr. McManus: 1968, 1969, approximately; does he know what the sales of spark plugs were.

A. It would be in excess of 600 million.

Q. (By Mr. McManus, continuing): So that if Mr. Shapiro's statement is correct and if your statement that there are approximately 600 million; there are now approximately 180 million spark plugs that are being sold over the counter, would that be correct? A. That would be correct.

Q. Now, in your opinion would a purchaser who buys over the counter be more sensitive to price then a person that goes into a filling station and has the plugs installed? A. I would expect that to be the case, yes.

Q. Now, directing your attention to Mr. Shapiro's chart in which he lists the $1.20 as the price, retail price of the spark plug, and then he lists the price to the warehouse [271] distributor as 42 cents; to a jobber at 54 cents; and to the filling station at 72 cents, if any of those steps were bypassed, then—in other words, if the warehouse distributor sold directly to the filling station—then the figures that he has set there would change, is that correct? A. That would be correct.

Q. Do you happen to know if in merchandising such as Sears, whether they buy things that are shipped directly from the plant, or do they go—all of their things go through warehouse distributors and jobbers and so forth? Do you have any information on that? A. I don't. My expectations would be that they would buy directly, where possible, since it would seem to me to be a cost saving to them to be able to deal directly rather than through a distribution channel.

Q. Also in our discussions here Mr. Shapiro has referred to the New Fostoria, and you talked in relation to the New Fostoria.

In the proposal of relief that the Government has, it's not your understanding that it will just be the New Fostoria there; it's the intention that someone with sufficient capital purchase it, is that correct? A. That's correct.

Q. So that it's not just any dollar that might have accrued to the plant that will be there, but it would have behind it the money of the corporation that purchased the plant? [275] A. That's correct.

Q. Now, again when Mr. Shapiro had gone over these various pricing figures that he had discussed and pointed out the difficulties that the New Fostoria might have and difficulties that he envisioned, in your opinion would Eltra

face similar difficulties if those difficulties are correct? A. Certainly.

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RECROSS EXAMINATION

By Mr. Shapiro:

[276] Q. Dr. Mann, in the year 1968, looking at Government Exhibit 1, does that figure 23.8 represent profit only in the sale of spark plugs? A. It is my understanding that Champion's sales revenue is nearly all accountable for spark plug sales. Profit figures that economists or anyone can use in Moody's Industrial or Value Line Investment Survey are always presented, usually, on a consolidated basis. Value Line frequently attempts to indicate to the investigator how the sales revenue is divided for a particular firm. It is my understanding that somewhere over 90 percent of the sales revenue is traceable to spark plugs. So that would mean that the profit figure would be largely attributable to spark plug volume.

Q. Well, Dr. Mann, do you know what Champion sales volume was in 1968? A. You mean sales revenue?

Q. Yes, net sales. A. No, I do not.

Q. Well, does the figure 253,174,000 sound about right? [277] A. Not having—not recalling the figure explicitly of Champion sales revenue, I can't really say whether it sounds right or—

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[278] Q. (By Mr. Shapiro, continuing): The Champion Spark Plug Annual Report indicates net sales revenues in 1967 of $204,681,000, and in 1968 of 253,174,000, an increase of approximately $50,000,000.

The Court: Is that net sales, you say?

Mr. Shapiro: Net sales, your Honor.

Q. (By Mr. Shapiro, continuing): Do you know, Dr. Mann, to what that increase might be attributed? A. That they sold more products or they charged higher prices for the existing volume.

The Court: What was the volume in '68?

Mr. Shapiro: 253 million, your Honor. Volume in '67, 204 million.

Q. (By Mr. Shapiro, continuing): Now, Dr. Mann, the volume for 1966 is 163,000,000; do you know anything that happened between 1966 and 1968 to increase Champion's volume by some 90 million dollars? A. No.

Q. Do you know whether Champion Spark Plug made any acquisition in the year 1967 and 1968 that would be consolidated with its spark plug sales? A. No.

Q. I show you page 9 of the Champion Annual Report, and particularly a reference to the DeVilbiss Company, do you [279] know anything about the DeVilbiss Company? A. I do not.

Q. Did you know that it belonged to Champion? A. I did not.

Q. Do you know when Champion acquired it? A. I do not.

Q. According to the Annual Report in the year 1967 half of the DeVilbiss group's sales were included in the Champion net sales figure and in 1968, for the first time, all of DeVilbiss' sales were included in the Champion net sales figure; did you know that? A. I did not.

Q. Does that have any effect on your testimony concerning profitability in the year 1968? A. I would have to know of Champion's total sales revenue, how much of it was attributable to the DeVilbiss Corporation.

Q. And you don't know that, do you? A. I do not know that.

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Testimony of Thomas C. Page, General Manager, Autolite Parts Division, Ford Motor Company

DIRECT EXAMINATION

[282] Q. Mr. Page, when Ford Motor Company acquired the Autolite assets in 1961, what was Ford Motor Company's objective in doing this? A. Our primary objective was to offer to the people who drive the products of the Ford Motor Company, cars and trucks, a better opportunity to obtain replacement parts for their vehicles than they had in the preceding years. From the time Ford Motor Company was formed in 1903 until 1958, the company had sold all of its replacement parts through its franchise dealer organization.

The Court: From 1903 to 1958?

A. Yes, sir.

During that, the latter part of that period of time, the 1950's particularly, the share of the service business reached by Ford Motor Company dealers was in a declining posture. It was the judgment of the company that we needed to have further access to providing parts to owners of Ford Motor Company vehicles. Consequently [283] in 1958 the company started what we call the Motorcraft Program which was a modest attempt to offer a limited number of parts to the independent aftermarket. We also started, shortly thereafter, what we call the Car Lite Glass Program which was another attempt to sell glass, automotive glass to the independent market.

Q. (By Mr. Shapiro, continuing): Do you know at approximately the time of the acquisition what Ford Motor Company's total independent after market sales of service parts were? A. Approximately 5 million.

The Court: At what time?

Mr. Shapiro: At the time of the acquisition, your Honor.

A. They were approximately 5 million dollars.

The Court: That figure represents what, again, please?

Mr. Shapiro: Ford's total independent aftermarket parts sales.

The Court: The figure again?

A. Approximately 5 million, your Honor.

Q. (By Mr. Shapiro, continuing) Now in G 14, Mr. Page, which is an exhibit which was introduced in the course of the trial of this case, there is a statement that at that time in 1960 the General Motors sales in the independent aftermarket were approximately 285 million dollars; do you [284] accept that figure? A. Yes, sir.

Q. When Ford desired, as you have testified to, to penetrate the independent aftermarket and make its parts available there to Ford owners, what channels of distribution did Ford Motor Company envision as being available to it? A. Basically two channels. One is the independent warehouse distributor channel and the second is national accounts.

[285] Q. Now, there is a heading in Ex. PB-3 above the years 1961, 1962, and 1963 called "First Period Reliance Upon Advertising and Sales Promotions".

Would you explain what that means and what it means in terms of the conduct of the Autolite Parts Division and the Ford Motor Company in the aftermarket? A. In the years 1961, 1962 and 1963, we continued to sell Autolite spark plugs to our dealers in a FoMoCo box, that is, a box bearing the FoMoCo identification as opposed to the Auto-

lite identification on the box, and we continued to merchandise those under what we call PA parts numbers, which are parts and accessory part numbers. The part number identification, therefore, was different from that which we sold in the independent channel where we sold an Autolite plug in an Autolite box and under an Autolite, specific Autolite number.

During these three years we relied [294] essentially upon our sales and promotional efforts, advertising et cetera, to move the Autolite plugs through the independent channel of distribution. We did not disturb our existing pattern of selling to the franchise dealers.

Q. Well, at what price during that period were you selling to dealers as compared with the so-called jobber price in the independent aftermarket? A. We were selling to our franchise vehicle dealers at a price that was, effectively, the jobber price in the independent trade.

Q. Well, would it have been economic from a business standpoint for the dealer to purchase spark plugs from a jobber in the independent aftermarket? A. He had no motive for purchasing that way because he could buy it just as cheaply directly from the company.

[295] Q. At that time, how was Ford Motor Company servicing the independent aftermarket in terms of warehousing and shipping? A. We had only one warehouse at Rawsonville, Michigan, which serviced our entire independent aftermarket channel of distribution. The Ford parts, that is, Ford-branded parts, continued to be supplied to our 24 depots around the United States.

Q. Would you describe those 24 depots? A. Yes. We have 24 warehouses—at that time, we had 24 warehouses—

The Court: "At that time" is in '61 to '63?

A. Yes, sir.

We had 24 warehouses around the United States that stocked what we called fast-moving parts, which is the high-dollar volume parts, but not necessarily the highest number of parts out there. In back of that, we had a warehouse here in Livonia, Michigan, which stocked the slow-moving parts.

Q. (By Mr. Shapiro, continuing): Do you still sell slow-moving parts out of the different warehousing system than fast-moving parts? A. The slow-moving parts are still sold through this one warehouse here in Livonia, Michigan.

Q. Now, what are the fast-moving parts? [296] A. In our 24 depots around the country, we have most of the Autolite-branded parts, plus Ford-branded parts, such as sheet metal, other parts that are needed to service our cars and trucks in operation, and the break between fast-moving and slow-moving is so many parts sales per year, depending upon the type of part.

Q. Did I understand that sheet metal is a fast-moving part under that category? A. Some parts of sheet metal are fast-moving. For example, a 1970 Ford fender is a fast-moving part; a 1956 Ford fender is a slow-moving part.

Q. Well, these warehouses, then, stock parts that are not branded "Autolite" or in the Autolite line? A. Oh, that is very true. Autolite is a relatively small share of the actual square footage of a warehouse.

Q. Are these warehouses automated in any way, or how do you keep track of the inventories in those warehouses? A. Well, we have a computer system that keeps inventory balances throughout our depot system, and a master record file kept here in the Detroit area, and we replenish these depots based on the daily sales and the depletion of the inventory out there.

Q. Now, during the time in this so-called first period, 1961 to '63, when you were servicing the independent after-

market out of the central warehouse, approximately how long would [297] it take from the time an order was placed by a warehouse distributor for the parts that he ordered to be delivered to him? A. Typically, he submitted one stock order per month. In addition, he could submit orders for out-of-stock conditions in between times. This contrasted very sharply with the supply system to our dealers where they were permitted a stock order a week on the basic Ford parts and could replenish daily, if needed.

Q. When you say they could replenish daily, if needed, do you mean out of the depots? A. Yes, the depots would meet any emergency order within, basically within four hours.

Q. Are these depots widely dispersed geographically throughout the country? A. Yes, sir, they are.

Q. Now, during that first period, when you were relying principally on advertising and sales promotion for your sales in the independent aftermarket, did your unit sales of spark plugs to Autolite distributors rise to any substantial extent? A. No, sir. They remained essentially static for the '61, '62 and 1963 period.

Q. The figure is, in 1961, that there were sales of 38.6 million; is that correct? [298] A. Yes, sir.

Q. And in 1963, sales of 39.6 million; is that correct? A. That is correct.

Q. Now, did this represent, this change of a million spark plugs more in 1963 over 1961, did this represent an increase or a decrease in Ford's share of the spark plug market? A. It represented a decrease because their basic demand was growing for the product and we weren't sharing in the growth.

Q. Well, what was Ford's market share in 1961? A. It was estimated to be 14.3 percent of the spark plug market.

Q. What was Ford's share in 1963? A. It had declined to 12.8 percent.

Q. Well, now, during this same first period, did the service parts and battery segment of the independent aftermarket increase or decrease in volume for the Ford Motor Company? A. It actually decreased in volume from 1961 to 1963.

Q. In 1961, those sales of service parts and batteries to the independent aftermarket were 42.6 percent, according to this chart; is that correct? A. That is correct, yes, sir.

Q. And in 1963, they had dropped to 36.9 percent; is that correct—I'm sorry—dollars; is that correct? A. That is right, sir.

[299] Q. That is 42.6 million dollars and 36.9 million dollars; is that correct? A. That is correct, yes, sir.

Q. Now, with respect to your total aftermarket sales under the Autolite brand in the independent aftermarket, what were your total sales for those three years? A. Well, our total in 1961 was 55.7 million; '62 it was 56.0 million, and in 1963 it had gone back to 55.9 million, so there was essentially no growth in this three-year period.

Q. Was Ford's performance in the independent aftermarket during those three years satisfactory from the standpoint of Ford Motor Company or the Autolite Parts Division? A. No, sir, they were not.

Q. Was it considered by Ford Motor Company and the Autolite Parts Division that the objectives of the acquisition of the Autolite assets were being achieved or furthered during that first period? A. No, sir, they were not.

Q. Did the Autolite Parts Division or Ford Motor Company, or both, take any steps to correct this condition? A. It was fairly obvious to us that some action was needed during this three-year period, and the first action that the

Company elected to take was in 1964 where we went to a common packaging program on our spark plugs so that the [300] same carton and therefore the same part number was used in both channels of distribution.

In addition, in October of 1964, we raised the price of the spark plug to the dealer to the dealer net price on our price list, substantial increase in price to the dealer organization.

Q. Well, now, as I understand your testimony, you took three actions. One was a pricing action— A. Yes, sir.

Q. —one was a packaging action, and the third was a part number action; is that correct? A. That is correct.

Q. Now, would you say whether these three actions had any consequence as far as the aftermarket was concerned? A. Yes, it did have a consequence. The sale of spark plugs directly to dealers took a substantial decline almost immediately. Secondly, the sale to the Autolite distributors started climbing almost immediately, and the net effect was that we did, in fact, improve our sales posture in the next two years following this action.

Q. Well, as I read the exhibit 3, your unit sales of spark plugs to Ford dealers declined from 18.4 million units to 8.6 million; is that correct? A. That is correct, yes, sir. 8.3 million.

[301] Q. From 18.4 to 8.6 in 1965, is that correct? A. Yes, sir.

Q. And then the decline was further in 1966 to 8.3, is that correct? A. That is correct.

Q. Do these figures represent millions of spark plugs? A. Millions of spark plugs, yes, sir.

Q. Your unit sales to Autolite distributors in 1964 were 48.3 million, is that correct? A. That is correct.

Q. And in 1965 they were 62.8 million, is that correct? A. Yes, sir.

Q. Now it would appear to me that the increase to the Autolite distributors was greater than the decrease of sales to the dealers between 1964 and 1965, is that correct? A. Yes, sir.

Q. Would you explain that? A. The opportunity created by our pricing posture with the franchise dealers was a very encouraging sign to our independent warehouse distribution system. As a result, they took a much more aggressive role in the sale of spark plugs in the market and we had an overall gain as a result of this action.

Q. Did this action have any effect on your ability to sign up new warehouse distributors? [302] A. Yes, it made it more attractive for new warehouse distributors to come to us.

Q. During this second period were your pricing action, your packaging action and your part number action took place; was there any change in Ford's share of the spark plug market? A. Yes, we had a very modest improvement in our share from 14.6 in 1964 to 15.3 in 1966.

Q. Now looking over at the dollar sales figure, your dollar sales of spark plugs in 1964 were 23.2 million, is that correct? A. Yes, sir.

Q. And your sales in 1966 rose to 31.3 million, is that correct? A. That is correct.

Q. Now was there a corresponding increase in your sales of service parts and batteries other than spark plugs? A. Yes, we did experience an increase from 38.4 million in 1964 to 42.0 million in 1966.

Q. That increase appears to be on a smaller scale than the other? A. Yes, sir, that is correct.

The Court: What accounts for the decrease in service parts and batteries in 1964 and 1965, dollar volume, do you know? And then there was a [303] substantial increase the next year?

A. I can't explain the 1965 decrease in service parts, your Honor, by a specific action. We were in a period here when we were trying to cultivate accounts. We lost a number of accounts. We added accounts and we concentrated our efforts on the spark plug since that's a leading item, and since we did not succeed in getting full line distribution, our plugs and batteries were not necessarily following each other in this period.

Q. (By Mr. Shapiro, continuing): Did you take any action after 1966 to further improve your position in the independent aftermarket? A. Yes, we did.

Q. Will you explain what those actions were? A. Well, the company was not, still not satisfied with the progress we were making with the Autolite line of products during this second three year phase, the 1964 to 1966 period. So in 1965 Mr. Ford asked that a study be undertaken to determine how we might improve our posture in the independent aftermarket. This study resulted in the consolidation of our parts activity in the company into the Autolite Ford parts division whereas previously the Ford Division, the Lincoln-Mercury Division and the old Autolite Division operated as independent entities within the company. That consolidation led us to several other actions that we felt [304] would contribute toward making our independent sales agreement a more attractive agreement to the aftermarket.

In 1966 we branded many more parts Autolite on the original equipment car. We changed all of our service parts, our electrical parts, our filter, perhaps some other miscellaneous parts.

Q. These are parts under the hood that you are referring to now? A. Under the hood of our car, on our cars and trucks, all car lines and truck lines in 1966.

The Court: You did what?

A. We changed the branding on these parts, your Honor, from Ford to Autolite under the hood so that every part was easily identified by a repairman as being an Autolite part on the car. This increased the attention paid to under the hood items with the Autolite branding and hence made our service parts line more attractive to the aftermarket.

Q. (By Mr. Shapiro, continuing): Did you do anything else? A. Yes, sir, in the spring of 1967 we elected to discontinue the sale of batteries through our franchise dealers permitting the independent channel of distribution, the warehouse distributors, to have 100 percent access to the battery market, the Autolite battery market.

Q. Of the dealers? A. Of the dealers, yes, sir.

[305] Q. Did this have any effect with respect to the dealers' sources of supply other than batteries? A. Oh, yes, it opened up the opportunity for the independent warehouse distributor and the jobber to approach the dealer more openly, particularly in regard to the battery because it became his only source of an Autolite battery and we encouraged the dealers to work with the independent distributors at this point of time, since there were batteries under warranty that needed that kind of service.

Q. Did you take any other action during that period? Did you take any action with respect to your depots during that period? A. Yes, in the spring of 1967 we, I believe it was April 1st, 1967, we decided to discontinue the central location for our warehouse, our Rawsonville warehouse and we disbursed the Autolite branded parts into each of the Autolite warehouses around the United States.

The Court: Did you actually discontinue the Rawsonville facilities?

A. Yes, we phased it out around the end of 1967.

The Court: That was your central depot?

A. That was our central depot as opposed to our Autolite depot which has the slow moving parts.

Q. (By Mr. Shapiro, continuing): What effect did the decentralization of your depot system for independent warehouse [306] servicing have with respect to your position in the independent aftermarket? A. Well, it enhanced our opportunity to talk to more warehouse distributors because it became a location where they could place a weekly stock order as opposed to a monthly stock order here, and it might be up to 30 days receiving their goods out of a central warehouse, they could get service within a week so it effectively reduced their inventory requirements. This in turn made it possible for smaller warehouse distributors and large jobbers to become warehouse distributors simply because they didn't have the capital to support a long pipeline, whereas on a week-to-week basis they could operate as effectively as warehouse distributors with less capital and an opportunity to expand their entry in the market.

The Court: What do you consider the difference to be between a jobber and a warehouse distributor?

A. Your Honor, to us a warehouse distributor is a person who sells essentially to jobbers. A jobber is the person who sells essentially to a retail establishment of one sort or another; it could be a fleet, gas station or independent garage. That's the essential differential but I must say, in all honesty, that the line is not clear in many cases.

[307] Q. (By Mr. Shapiro, continuing): Mr. Page, in 1967 was Ford Motor Company offering any kind of training service for the independent aftermarket? A. Yes. We offered training for the independent aftermarket almost from the time of the acquisition, although in the early years it was a rather modest offer.

Q. What was the nature of your service program in the early years from 1962 to 1966? A. We had a few service instructors who would travel around the country and who would offer training sessions to the mechanics of our accounts at that time. We then developed a training manual which is a home study course but which can be broken up and used in meetings as well, that was developed in the early sixties—I'm not just certain of year of development there—which has almost become a bible in the industry today for training on tune-up and electrical problems.

Q. Was there any change in the service, the training service program offered by Ford Motor Company to the independent aftermarket between the periods that we call the first and second periods and the period that we call the third period? A. Yes, sir. We greatly expanded it in 1967. We went to one instructor in each of our 24 sales districts, and this increased the opportunity to hold these clinics.

[308] The Court: When did you start holding these clinics?

The Witness: We had some clinics as early as—I'm conjecturing a bit—I would say '62—probably '61 or '62 we had a limited number of clinics at that time.

The Court: Is that similar to the clinics that G.M. had for some years before?

A. General Motors has offered courses. Basically, the General Motors training is done in their own training schools however, the G.M. schools around the country. By and large, we take our training directly to the account, your Honor. We offer the clinic in the place of business.

The Court: Is that the warehouse distributor or the dealer, or what?

The Witness: The jobbers who work out of the warehouse distributor will ask us to set up a clinic in Brighton, Michigan.

The Court: What do you mean; invite the dealers in, is that it?

The Witness: The jobber our customer wants removed does the invitation, he invites the mechanics from the local service station or the garage into this. Typically, we have 8 to 20 in the clinic, which lasts generally two hours a night and probably [309] two nights a week, and then four or five hours of instruction with a small group like that, we can get rather effective training on tune up work or electrical problems. That's the essence of our training, is in that area.

Q. (By Mr. Shapiro, continuing): Do you recall, Mr. Page, how many instructors you increased to in 1967? A. I know we went to one per district, and there may be some districts with more than one.

Q. Well, that would be 24, would it not? A. A minimum of 24, and I suspect there really are probably three or four more than that.

Q. More than that? A. Yes.

Q. How many had you had before, do you know? A. Only a very few, five or fewer.

The Court: What year again did you say you started this?

The Witness: The expanded program?

The Court: The expanded program.

The Witness: It started in 1967, your Honor.

The Court: You say in 1962, was it, you started this?

The Witness: In 1962 we had a very modest program there, a very limited program with only [310] three or four instructors on a national basis, which gives you not much opportunity to train great numbers of people.

Q. (By Mr. Shapiro, continuing); Then you increased from approximately 5 to approximately 24 or more in 1967; is that correct? A. Yes, sir, that's correct.

The Court: Then how many again in 1967?

The Witness: In 1967 I believe we went—I know we had one per district, which is 24, and I believe we may have had some districts with 2, so there's probably 25, 26 or 27, somewhere in that range in 1967.

Q. (By Mr. Shapiro, continuing): Now, these instructors that we're talking about, are they limited to the independent aftermarket or do they also work with Ford dealers? A. They work with both sets of customers. That is, they do some training for dealers and some for independents.

Q. When they deal with the people in the independent aftermarket do they have an O.E. orientation or an all-make orientation, or what is their orientation? A. Well, their orientation is all-make, of course, because the service stations and the garages that they are serving are serving all makes of cars. So we can't limit our training to Ford vehicles, as opposed to the dealership where we tend to orient it around our own product.

Q. The training that you give the mechanics, the service people [311] invited in by the jobber, is training which is usable by them in the repair of all vehicles? A. Yes, sir.

Q. It is not limited to Ford vehicles? A. No, sir.

The Court: Well, is it limited to the application of Autolite parts to all vehicles?

The Witness: No, sir. It's limited to the electrical system of all vehicles. I might say—all vehicles, that does not include all of the foreign cars that are brought in. Those are basically domestic cars.

Q. (By Mr. Shapiro, continuing): Mr. Page, Exhibit 3 shows a fairly sharp drop in spark plug sales and in share of market in the year 1967. Can you explain that? A. Yes, sir. We had a 60-day work interruption in 1967 which deterred us from selling during most of October and November of 1967.

Q. A strike, in other words? A. Yes, sir.

Q. Well, now, apart from the consequences of the strike were your efforts in the third period, 1967 to 1969, successful in the aftermarket? A. Yes, sir. I believe we are succeeding, finally.

Q. What is the relationship between your share of the spark [312] plug market in 1969 and your share of the spark plug market in 1966? A. Well, in 1966 our share was estimated at 15.3 percent of the industry; by 1969 it was almost 19 percent, at 18.9 percent of the industry.

Q. So there was an increase of in excess of three percent in terms of spark plug market shares; is that correct? A. Yes, sir.

Q. What was the relationship between your unit sales of spark plugs in 1969 and your unit sales of spark plugs in 1966? A. Well, our unit sales in 1966 were 77.8 million, and this had increased in 1969 to 109.8 million.

Q. In the independent aftermarket, specifically what was that? A. Well, in 1969, out of the 109.8, 96.6 were to the independent channel and a little over 13 million were sold to our franchise dealers.

Q. Now, during all of these three periods of time did you continue to advertise and promote, in addition to these various other activities?

The Court: Did you continue to advertise what? Excuse me.

Mr. Shapiro: Advertise and promote.

The Court: I probably interrupted your question. I wanted to be sure about it.

[313] Mr. Shapiro: Not at all, your Honor.

The Court: Did you get it, Mr. Reporter? I kind of interrupted. I thought you were through, but you were not.

Did you understand the question?

The Witness: I think so.

Would you restate the question, please, Mr. Shapiro?

Mr. Shapiro: Yes, I would be glad to.

Q. (By Mr. Shapiro, continuing): During all of those three periods did you advertise and promote, in addition to taking the other actions that you have been describing? A. Yes, sir, we did.

Q. Mr. Page, in addition to the training courses that you have been describing here, do you have a school for the mechanics of your dealers? A. Yes. The Company has several schools where we do train mechanics of dealers in many more complicated matters than the basic electrical training that we offer under the Autolite program.

Q. So that the activity that you have been describing in the independent aftermarket has been activity in addition to the operation of those schools, is that correct? A. Yes, sir. It's incremental to the schools.

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[320] Q. Well, is the availability of a spark plug from Ford Motor Company significant in the process of signing warehouse distributors in the independent aftermarket? A. It is essential.

Q. Will you explain that? A. The concept that we are selling under today, these last three years, has basically been what we call the full-line concept. The full-line concept meaning basically that we want the account to carry those parts that are normally needed in the faster type of repairs accomplished by the [321] repair garages and the service stations in this country.

The Court: What do you say the full-line concept means? A. The full-line concept, your Honor, is having this warehouse distributor carry each of the eight product lines that we offer under the Autolite brand.

The Court: Each of the what?

A. Eight, eight different product lines, that is, in addition to the spark plugs, batteries, the carburators, shock absorbers and all of the lines that carry Autolite brand. By having—

The Court: You say these eight are in addition to what?

A. The eight include—

The Court: Oh, include.

A. —include the spark plugs. There are seven lines, plus spark plugs—

The Court: Oh, I see.

A. —that we have branded "Autolite" on the car and which we try to merchandise under the Autolite brand in the independent aftermarket.

Now, referring back to your question of the essentiality of the spark plug: The full-line concept must have those items that are in greatest demand at the retail level, which are essentially spark plugs and [322] batteries, filters being the third item, the next most important item and if you do not have those items which constitute a significant the stocking and the needs of the repair station, you simply don't have a full line. Therefore, it loses its attractiveness as a merchandising concept.

Q. (By Mr. Shapiro, continuing): Well, the attractiveness, then, of the merchandising concept is that your customers purchase from you all of the parts that they need in order to supply the retailer with what he needs for the job he is doing, is that correct? A. That is correct.

Q. Well, how does Ford Motor Company expect to be reimbursed or in some way rewarded for the part of the profit that their sales to dealers would give them which they are giving away to the independent aftermarket? A. By achieving greater distribution through the acquisition of these good accounts. They sell to places other than dealerships, and if we encourage them to carry our full line and if they have this opportunity to enter the dealership with a portion of their business, they then become more aggresive in the independent aftermarket and sell to the independent—to the jobbers who in turn sell to the independent garages, the fleets, the service stations and so forth.

Q. Well, is it fair to say that the dealerships act as a [323] nucleus for that further expansion of their business? A. Yes, that is right.

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[344] Q. (By Mr. Shapiro, continuing): Mr. Page, is there any difference in the profit that Ford Motor Company makes when it sells a spark plug for a General Motors

or Chrysler application than the profit it makes when it sells a spark plug for a Ford application? A. No, sir.

Q. The profit is identical? A. Yes, sir.

Q. Does Ford have an interest in selling spark plugs for General Motors and Chrysler applications as well as those for Ford applications? A. It certainly does.

[345] Q. In terms of the number of vehicles on the road, approximately what percentage are Ford vehicles and what percentage are non-Ford vehicles? A. The Ford vehicle population is roughly 1/4th of the cars on the road and therefore 3/4ths of them are non-Ford.

Q. Does Ford Motor Company have a desire to sell spark plugs to the 75 percent cars on the road? A. Yes, sir.

Q. Does Ford Motor Company expend effort in that direction? A. Yes, we certainly do.

Q. Are you in charge of that effort as far as the Autolite Division is concerned? A. Yes, sir.

Q. Can you state, in terms of a proportion of your time and effort devoted to spark plugs, how it divides between selling spark plugs for all-make applications and selling spark plugs for Ford original equipment application? A. Are you referring to my personal time, sir?

Q. Yes, sir.

The Court: What do you mean, Ford original equipment, you mean replacement?

Mr. Shapiro: Replacement for Ford, yes, Ford original equipment replacement application.

A. Frankly, I don't keep track of my time in terms of one line of products versus another, Mr. Shapiro. But certainly [346] we spend a considerable amount of effort on the all-make approach simply because we feel it's a field of opportunity for us.

Q. (By Mr. Shapiro, continuing): Now despite these efforts—I'll withdraw that.

Do you know approximately what the ratio is in percentage terms of the spark plugs sold by Ford Motor Company in the aftermarket which are for Ford replacement application rather than for the non-Ford replacement application? A. Yes, sir, I am aware of that. We sell about three-quarters, about 75 percent of our spark plug sales are for Ford application, and about one-quarter are for non-Ford application.

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[349] Q. Do you know approximately what share of the spark plug replacement market is occupied now by the Autolite brand? A. We estimate it to be approximately 19 percent in 1969.

[350] The Court: Read the question, please.

(Whereupon the record was read.)

Mr. Shapiro: 19 percent in 1969, your Honor.

The Court: All right.

Q. (By Mr. Shapiro, continuing): Have you estimated the Champion share of the replacement spark plug market for the year 1969? A. Yes, we estimate it to be approximately 41 percent.

[351] Q. Have you estimated A.C.'s share of replacement spark plug market in the year 1969? A. Yes. We estimate that to be approximately 34 percent.

Mr. McManus: Excuse me. Could I ask you, was he talking about the independent aftermarket or is this the total?

Mr. Shapiro: Total replacement market, I assume.

A. Total replacement market, yes.

Mr. McManus: Thank you. I'm sorry.

Q. (By Mr. Shapiro, continuing): Compared to the A.C. and Champion in terms of market share, how would you characterize Autolite's relative position in the replacement market for spark plugs? A. I would characterize it as a weak third place.

Q. Now, Mr. Page, when we were talking about FR-11 and you testified that in 1966 your O.E. replacement sales were 70.9 of your total replacement sales, whereas, in 1968 they were 75.2 percent; did that change in percentage occur despite the advertising and effort with respect to all-make that you've testified about? A. Yes, it did.

Q. Do you have any explanation for the increasing percentage of original equipment replacement sales? A. I believe there is a strong O.E. association on the Autolite [352] plug, and as the number of Ford units with the Autolite plug as original equipment becomes larger, the tendency is toward a higher share. Conversely, the number of Chrysler cars that carried the O.E. plug back in the 1950's are on the decline, of course; so the tendency would be for that share of the market to decline. The inevitable result is that we keep rising with our O.E. application in spark plug sales.

Q. In the spark plug aftermarket is Autolite a price leader or a price follower? A. Autolite is strictly a price follower.

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[370] Q. Well, is it true that the Autolite price in 1958 through 1967 was below, as far as the warehouse distributor price is concerned, below both the A.C. and the Champion warehouse distributor prices? A. Yes, that's correct.

Q. During that time did Ford Motor Company experience any volume for market share benefit from the fact that their warehouse distributor price was below those of A.C. and

Champion, in your opinion? A. No, sir. In my opinion, we did not.

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[374] Q. Well, during the period 1958 to 19— through 1967, Autolite's price was two or three cents per plug to warehouse distributors under that of A.C. and Champion. Can you explain why they didn't meet that price? A. In my view, neither Champion nor A.C. felt any great pressure from the Autolite share in the market. We were relatively small. Three cents differential was dissipated in the distribution pattern. We were basically the same at the retail price level and we did not, frankly, create enough of a stir in the market to cause them to react.

Q. Now, in 1968 and 1969 and 1970, the Autolite price to the warehouse distributor has moved up to relatively the same price as A.C. and Champion, is that correct? A. Yes, sir.

Q. Now, in 1968 and 1969, did Autolite experience any adverse consequence of having moved its warehouse distributor price up to the A.C. and Champion warehouse distributor price level? A. Well, sales volumes would indicate to the contrary that our sales improved in the last three years. I don't attribute this to the fact that we increased the price that—I attribute it to the fact that, along with the other activities that we had undertaken, which we had described [375] previously, that there was no harm rendered to us by being fully competitive in price.

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Q. (By Mr. Shapiro, continuing): Would you explain Exhibit 13 B? A. Well, this is an exhibit that sets forth the total size of the market at some 600 million spark plugs of which we estimate that approximately 35 percent are

sold through the service station market. That would be equivalent to 210 million spark plugs.

Taking the total number of service stations in this country, some 230 thousand that meet the Bureau of Census description of a service station—

[376] The Court: Is this approved dealers as well?

A. No, sir. This is pure service stations, sir.

There would be an average sale per station of about 900 spark plugs per year. If you assume that our share was roughly 20 percent of that, that is, Autolite's share was roughly 20 percent of that, that's the equivalent of about 180 plugs per station per year.

The effect of a price reduction of two cents was suggested yesterday, I believe, would earn the station net income of $3.60 a year, the average station.

The Court: What was this suggested two cents differential?

Mr. Shapiro: Well, your Honor, I—

The Court: While Mr. Mann was on?

Mr. Shapiro: Yes, sir. I asked Dr. Mann what he thought would be necessary in terms of a price reduction to a retail outlet to make the spark plug more attractive than Champion or A.C., and he testified that he thought two cents would be enough, and I asked him how many plugs a station would have to sell to obtain a $500 benefit, and we figured it was about 25 thousand plugs. However, Mr. Page testifies that the average plugs per station are approximately 900.

Q. (By Mr. Shapiro, continuing): Well, now, what is the [377] material at the bottom of the page, "cost to service to

carry inventory of Autolite spark plugs"? What does that mean? A. Well, basically, any time you have inventory, there's value attached to that. That is, you have a certain amount of capital tied up in your inventory, and if a station were not carrying the Autolite plugs and, therefore, had to make the inventory investment to carry adequate amount of service, 180 plugs a year, obviously, he would have a certain capital cost, which we computed about $2.10 at a 10 percent inventory value. So, in effect, if he were not carrying our plug and the inducement of two cents a plug to carry it, it would cost him some added inventory money. The net would be approximately $1.50 per year incremental profit.

[378] Q. Well, now, Mr. Page, suppose that you were to apply the assumption contained in FR-13A to the tabulation in 13B so that the benefit to the retailer, instead of being 2 cents, were 20 cents? What then would be the effect of reduction in the price of Autolite spark plugs to the service station instead of the $3.60 figure? A. Well, it would be approximately 10 times $3.60, or $36.00 per year.

Q. What would the economic increment figure be that now appears at the bottom of 13B? A. If he is acquiring it at a lower price, he would—

Q. Wouldn't that be 10 times a dollar fifty? A. No, Mr. Shapiro, it wouldn't.

Q. No? A. Because his inventory value would be less, you see, if he were procuring for 20 cents a plug less, so it would be less than that, so the incremental, the economic increment would be somewhat greater. I would have to go through the arithmetic here, but it wouldn't be significant.

Q. It would be somewhere between $15.00 and $36.00; is that correct? A. Yes, that is correct. It would be somewhere between there.

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[380] Q. (By Mr. Shapiro, continuing): Would $36.00 per year, in your opinion, Mr. Page, be sufficient to motivate a retail service station to change his stocking practice of spark plugs? A. In my judgment, it probably would not.

Q. Mr. Page, where is the demand for a particular spark plug brand generated? A. The demand for a spark plug, if I exclude fleets and national accounts, the demand for a service station and independent garage is generally created at the installer level. The installer makes known his needs to the jobber who, in turn, makes known his needs to the warehouse distributor who, in turn, buys from the manufacturer of his choice.

The reason I believe this is such a strong motivational factor is that at the retail service station level specifically, where the mechanic is frequently the station operator or else he is instructed by [381] the station operator, the motive of that station operator is to build repeat business with his customers, primarily gasoline and oil sales. He wants that man driving in twice a week to fill up the tank. The fact that he gets a tune-up once a year or a brake adjustment or some other job done there on a rare occasion is secondary to keeping him as a customer.

Therefore, the station operator wants to please the owner of the vehicle in every way he can to retain him as a customer. Hence, when he comes in for a tune-up, there is a great propensity to try to give him the best conceivable service. Since a station operator is not highly knowledgeable about the hundreds of different spark plugs in the market, or the many different point sets or condensers or other components, he tends to replace in kind. It is his greatest assurance that he is doing the right thing for the customer there and this, I think, is—there is really no history about O.E. identification. It is very simple. It is the

most assured way that the man who accomplishes the repair has of satisfying his customer, and in the case of a service station, the degree of satisfaction has to be great because he wants to retain him for all the other potential sales he has with him. He makes more selling gasoline over the course of a year than he makes on a single tune-up by far, or oil change [382] or whatever other duties he may be called upon to do.

So it is not an aura of mystery about O.E. identification. It is a rather clear-cut and simple thing when you get down to the man with dirty hands, the installer.

Q. In your opinion, could the New Fostoria, if it did not have this O.E. association, accomplish the objectives that the Government has professed for its plan in the independent aftermarket on a price basis? A. In my judgment, New Fostoria cannot win on a price basis. As we have looked at some of these exhibits, there is really no motive for the people in the channel of distribution to push New Fostoria plugs, unless there is an economic advantage laid out for them. When you lay out the economic advantage, as we did on Schedule 13A, there is no manufacturing motive left at that point. The alternative of reducing the price to the customer and try to create a demand from that aspect has shrinking margins all the way down the line. Hence, the installer is not going to push a spark plug that he makes less money on, because he can only install eight per car no matter which one he installs, so he is going to choose the one that has the best economic motive, and as long as he can satisfy the owner of that vehicle.

It would take, in my judgment, a [383] tremendous price change to motive many people to change—that is, many people in the chain of distribution to go from one brand to another, and I think it is just uneconomic.

Secondly, were Autolite to have a substantial price reduction in spark plugs and we began to have an effect upon the sale of Champion or A.C., I am very sure there would be a competitive response of some sort, and our advantage would be short-lived. I am sure it is true that if a small, very small producer came into the marketplace, or if he had a private brand that was not original equipment on anything, that would not provoke, you know, a major reaction in the industry because it would not be a significant impact on Champion or A.C., the dominant people, but being in a third posture, as we are at Autolite, a significant price reduction, in my judgment, would trigger a reaction. A very modest reduction probably would not.

Q. Would such a reaction, in your view, be triggered if it were not Ford but the New Fostoria that took that pricing action? A. A minor action by New Fostoria probably would not trigger a competitive reaction. A major one might.

Q. Well, under what circumstances would a major price reduction by the New Fostoria which would affect Champion and A.C. not [384] trigger a response? A. If New Fostoria were having an impact upon Champion or A.C., I think it would trigger it. If it was having no impact, obviously it would not. There is no motive for reacting.

Q. If there were an impact, it would trigger a response; if there were no impact, it would not? A. That would mean they would have no sales.

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[405] Mr. Shapiro: Your Honor, just for the record, because the Xerox copies [of FR-15] are not very legible, on the little graph or chart in the lower right-hand corner, the figures for service stations are

31 percent, 1964; 27 percent, 1969. These are the estimated shares of market.

Garages: 1964, 25 percent; 1969, 15 percent.

Car dealers: 1964, 23 percent; 1969, 22 percent.

Auto stores: 1964, 14 percent; 1969, 16 percent.

Mass merchandisers: 1964, 7 percent, [406] 1969, 20 percent.

Those are shares of market for spark plugs.

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[423] A. Well, our progress in the field of national accounts hasn't been satisfactory to us in the last few years, primarily because we have not been effective in reaching these particular stations, this particular series of stations, with our product. That is, we are not the primary product, primary spark plug being sold by these oil companies and rubber companies. We play a secondary or a tertiary role.

Q. Well, do you have a view as to why you haven't been able to go beyond a tertiary role to a more satisfactory role in terms of oil company service stations and the rubber company accounts? A. Well, most of these oil companies are small, of course, that are on our national account list. Only one or two of these have we succeeded in having aggressive merchandising being undertaken by the oil company for our products. For example, Union Oil Company in California and one or two others have succeeded in doing a fairly good job for us, but, on the whole, we have not succeeded in receiving primary attention from the oil company itself.

Q. Well, do you know whether A.C. or Champion has had any other or different record of achievement in this area? A. Yes. Both Champion and A.C. have been successful in the national account field, and they are rather.

firmly entrenched today with the oil companies. This has been [424] a historical pattern over a number of years.

Q. Your effort, then, has been essentially directed against what you characterized as an entrenched position of Champion and A.C.; is that correct? A. That is correct, yes, sir.

The Court: Do you characterize that as unsuccessful with respect to these national accounts?

A. Yes, sir. I don't believe we are successful in the national account field to date.

There are perhaps some other reasons for this, in addition to the entrenched position. In the case of the Standard Oil Company, of course, the private brand aspects of Atlas has been exploited by the Standard Oil interests for a number of years and I think that makes—

The Court: Of course, that would be true as to A.C. and Champion, too, wouldn't it?

A. Yes, it would, but it has made it particularly difficult for us. We have not succeeded in getting any other lines as well as the spark plugs into the Standard Oil chain.

I think there is one other aspect that might contribute to this. That is that Champion, for example, has done considerable missionary work and continues to do considerable missionary work—that is, where they have missionary salesmen working directly with the retail outlets which strengthen their posture out there. They [425] are dedicated men whose sole objective in life is helping to sell spark plugs to retail outlets. We do not have any equivalent capability in our Autolite-Ford setup. Our people sell all products.

Q. (By Mr. Shapiro, continuing): Is that an expensive operation that Champion engages in, this missionary work

that you are talking about? A. Yes, it costs money to have men on the road all the time and they apparently feel that it is worth it to do that on a single product line.

Q. Well, has Ford considered launching a comparable missionary campaign to sell at the retail level? A. Well, we don't have such a missionary force today. We do have at the moment a missionary test being tried out in one market where we are attempting to exploit the opportunities in the market this same way, but that's been a very brief test and I don't have results that I would call definitive to date.

Q. Does A.C. have a comparable missionary activity? A. A.C. has a missionary sales force comparable to the Champion force, yes, sir.

Q. So it is only Autolite that doesn't, of the "Big 3"? A. That's correct.

Q. Does it take any particulary measure of success in the aftermarket already existing to make such a missionary sales [426] force pay, or could anybody do it? A. No, I don't think anybody could do it. I think there is a minimum level of sales that are required to support a missionary force, because a man, geographically, can only cover so big an area and a small company trying to go on a national basis would not be effective without missionary men covering specific geographic market areas, where he could contact the stations rather regularly. The missionary sales force is effective only if it has a continuous or a repeat pattern where they can go back and continue working with them.

Q. Have you reached any conclusion at this point as to whether it would pay for Autolite to have such a missionary sales force? A. That is what we are testing today, and I don't believe our results are sufficiently conclusive to

prove or disapprove this theory. It is my personal belief that it would be satisfactory, but I can't establish that as yet.

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[427] Q. Mr. Page, just before lunch you were testifying about Ford's missionary experiment in the independent and dealer aftermarket. Would you describe that experiment in a little greater detail? A. Yes, sir. Last August in the New York area we launched a missionary sales test in which we hired five men whose duty it was to go out and do missionary sales work for us. These men were given instruction in the sale of products, all products to the various types of outlets they would call upon which included service stations, it included independent garages, it included fleets—possibly other types of customers—and their duties were to work with our accounts, whether they were warehouse distributors, jobbers or franchise dealers to assist them in building new business by contacting establishments that were not [428] carrying out Autolite branded products, and thereby helping our direct selling organization to achieve greater sales in that area.

Q. Now you were working with the customers of dealers? A. Customers of dealers, yes.

Q. And customers of jobbers? A. Customers of jobbers.

Q. In other words, you were dealing at the retail level with the customers of all of the different wholesale segments of the aftermarket, is that correct? A. That is correct.

Q. Now were these people working only with spark plugs or were they working with other parts as well? A. No, they were not limited to spark plugs. They handled all of the Autolite line of products, including shock absorbers, filters, plugs, batteries, everything.

Q. Now when you talked about the missionary activity of the Champion Spark Plug Company, what products were those missionary people working with? A. Champion's missionary men work exclusively with plugs. A.C.'s missionary men cover a slightly broader line, that is, they have filters and plugs.

Q. But Autolite missionary people handle all of the parts that you mentioned? A. They handle all our products that are branded Autolite.

[429] Q. When you expressed a feeling of optimism as to this experiment, were you thinking of it in terms of spark plugs specifically or all of the parts collectively? A. It's my view, based on the six months that we have been running this test, that the test is very successful in its broad scope, that is, selling a full line of products. I'm not sure that we could successfully launch it on a limited line of products, for example, spark plugs or filters or some specific product line.

Q. Now if a company such as the New Fostoria carrying, if it did, only spark plugs; could it justify a missionary system such as the one you are talking about? A. I doubt that it could sustain a missionary sales force based on the volume level that we are operating at today in the independent market with the Autolite branded spark plugs.

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[441] Q. (By Mr. Shapiro, continuing): Now, you testified in connection with FRC-20 as to what might happen with respect to the various categories of account in the sense of saying that they are dependent upon certain things that you specified in your testimony. Now, what, in your opinion, would happen to the business represented by these accounts in the five categories listed on FRC-20 in the event

that a divestiture were to take place? A. In the event of divestiture, it's my judgment that the accounts that were labeled current A.C. or Champion accounts would drop the Autolite line and revert to A.C. or Champion, whichever they may be handling, because they retain the Autolite today simply because of its original equipment.

The vehicle dealer expediters would, in my judgment, cease to exist were Autolite not original equipment and were the full line not available because they can't live on one product alone. The low volume redistributors—

Q. Well, the business that they would have to the extent they're selling to Ford dealers would go back to Ford Motor Company, would it not? A. Yes, it would go back to us and we would supply these supplies through our normal depot supply system. The low volume redistributors in all probability would revert to jobber status simply because they don't have the capital to sustain themselves if they were put back on a supply basis [442] equivalent to Champion or A.C., who do not supply in 24 depots around the country. The Autolite specialists, although they are relatively few in number, being so heavily dependent on us would not find a home, I don't think, with any other supplier who did not carry the full line of products; hence, in a divestiture action, it seems unlikely to me that these people could sustain themselves as a full warehouse distributor.

The fifth category—

Q. Well, what do you suppose would happen to the volume of business in the independent aftermarket represented by those people? A. Insofar as the products they were selling, we're getting back into the dealers' hands, of course, they would simply revert to Ford Motor Company through another avenue. The sales that they were

achieving elsewhere would probably fall to other producers in the marketplace, depending upon the type of product that they were moving.

Q. And in the spark plug area— A. Spark plug market.

Q. —what would those other producers be? A. A.C. or Champion, basically.

For the fifth category of the '67 to '69 distributors, were those people who we had acquired simply because we offered the full line of products because we had [443] original equipment status, because we had the depot system and so forth, these people would, in all probability, not be willing to go with someone who had a single line of product. They would tend to revert back to the status they had before, which is—

Q. And their spark plug business would fall to whom? A. I would imagine their spark plug business would go back to Champion or A.C.

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[457] Q. (By Mr. Shapiro, continuing): Mr. Page, would you look at FR-27 and explain what it shows? A. In contrast to the preceding chart which we showed which was all service work, this one is specifically oriented to engine tune-up, and it shows the share of business achieved by service stations, independent garages, the do-it-yourself person, the specialty shop, the mass [458] merchandiser and dealerships on vehicles of different ages.

In the first column, cars that are two years old or newer, the share of the business going to the vehicle dealership is quite high. It's at 44 percent.

The service stations are the next highest share of the business, performing approximately 27 percent of the tune-ups, with the independent garages at 15 and the rest of them comprising the balance. As the car gets older, that

is, three to five years of age, the dealership share declines from the 44 percent shown in the first column for the new vehicle to approximately 27 percent. The service station and the independent garage tends to pick up a share in this period and most of the other smaller outlets remain essentially constant.

Q. Now, Mr. Page, the average of cars, zero to five years old, come back to the dealership for tune-up in what percentage? What percentage— A. About 35 percent returned to the franchised dealer.

Q. Now, if the Autolite trademark did not have O.E. status, what would be the likelihood that that 35 percent of a tune-up market would be available to the Autolite spark plug? A. Would you repeat that question again, Mr. Shapiro?

Q. Yes. I say: If the Autolite trademark on spark plugs did [459] not have original equipment status on a major vehicle, what share—I mean, what would you expect would be the portion of that 35 percent of the tune-ups that are done in dealerships to be available to the Autolite spark plug? A. None.

Q. Now, of these 65 percent of the non-dealership tune-ups, 31 percent are service stations, is that correct? A. That's correct, yes, sir.

Q. Now, we've—

> Mr. McManus: Am I right if I—I don't know if I heard you when Mr. Shapiro asked you if the, under the Government plan there was a New Fostoria, the car, zero to five years old, you said that none of them would come back to the dealership. Was that your word, "none"?

A. No, sir, I—perhaps I didn't understand the question.

Mr. Shapiro: Well, I said if the trademark, Autolite did not have O.E. status on a major vehicle, how much of the tune-up work done in dealerships would be done with Autolite spark plugs, and Mr. Page said he didn't think any would.

Mr. McManus: Oh, this would be after it would no longer have O.E. status?

Mr. Shapiro: That was the question.

A. After a brand X existed on the vehicle.

Mr. McManus: So it would be ten years [460] away, at least, because it would be on the vehicle for at least ten years.

Excuse me, was that 27?

Mr. Shapiro: That was 27.

Q. (By Mr. Shapiro, continuing): Mr. Page, I think Mr. McManus said that Autolite spark plugs' name under the Government plan would continue to be original equipment on Ford vehicles for a period of ten years. Now, is that consistent or inconsistent with Exhibit FRC-24? A. No, it is not, because under Exhibit 24, we would presume to drop the Autolite name as original equipment at the earliest feasible time.

Q. And that would be the last year of original equipment status, would be 1976 under that plan, is that correct? A. That's correct.

Q. As shown in Exhibit 24? A. There would be a phasing-out period from 1974 through 1976. Diminishing number of vehicles would bear the Autolite name, on the balance during that period would bear the brand X name.

Q. Well, now, we were talking about the 31 percent tune-ups on vehicles, zero to five years of age, that are performed by service stations. Do you see the place on Exhibit 27 where that is indicated? A. Yes, sir.

[461] Q. Now, we have seen from Exhibit 38 at the trial, F-38, that only 40 percent of those—or 41 percent of those stock the Autolite brand now at the time that it is original equipment, is that correct? A. That's correct, yes, sir.

Q. When I say, "now," I mean 1966, as it was in F-38, and your testimony is that is approximately the same? A. Essentially the same today, yes.

Q. And of the 40 percent that now stock the Autolite brand, 72 percent of those also stock A.C. and Champion, is that correct? A. That is correct.

Q. Now in your opinion, if the Autolite trademark did not have original equipment status, would it be stocked by those service stations which now stock Champion, A.C. and Autolite? A. It would not likely be stocked by those beyond the short change-over period. I think it would be a diminishing of stations that carried two brands, Champion and Autolite, that were not original equipment, and in that battle, I think the Autolite name would tend to fall behind Champion as the predominant one on the shelf. So, there would be, in my opinion, a rather rapid reduction in the number of stations that carried the Autolite brand as the third brand.

* * * * *

[470] Q. (By Mr. Shapiro, continuing): Have you, Mr. Page, formed a view as to whether or not there is a relationship between prospective emission control regulation and the future status of the O.E. concept in the independent spark plug aftermarket? A. Yes, sir, I do not have a view on this.

Q. What is your view? A. My view is that the establishment of more stringent pollution controls will cause the owners of vehicles to keep their cars in better shape from the tune-up viewpoint. If they are to pass certain minimum

standards on pollution in the air. I am sure that by sometime in the 1970's there will be adequate testing devices available to the states and other regulatory agencies that will permit measurement from time to time of the amount of hydrocarbons and carbon monoxide that any vehicle emits into the air.

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[473] "Q. Well, Mr. Page, from the marketing point of view what if any relationship do you see between the emission control programs that you have testified about and the original equipment preference in the automobile aftermarket?" A. The emission control standards that have been established basically require a tuned car to meet the standards. If there is a need for concise tuning of the vehicle, then I think there is likely to be a relationship between that and the spark plug which is in the car.

This comes about because the spark plug is an integral part of the ignition system of the car, and hence, must be suited to that particular engine to keep the hydrocarbons and the carbon monoxide and other gasses within the tolerable limits. Under these circumstances, a tuning of the car becomes a necessity, and hence, the frequent tuning of a car will require the use of new spark plugs from time to time to meet those standards.

Therefore, I think it's likely that the interest in an O.E. spark plug would tend to rise, not decline, in this sort of an air pollution climate.

Q. (By Mr. Shapiro, continuing): Would you, Mr. Page, look at FRC-24.

[474] Now, you have testified as to certain marketing problems that you would face in the event that you adopted Brand X as is permitted by the Government's decree. Will you state what your recommendation to the company would

be, in all the circumstances, as to whether or not to adopt Brand X as permitted by the Government's decree? A. I would certainly recommend that we adopt Brand X as original equipment at the earliest feasible time, and continue to use it as our new brand on our vehicles thereafter.

Q. In your opinion could the New Fostoria operate successfully in the independent aftermarket without original equipment association on Ford or any other make of vehicle? A. No, I don't believe so.

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CROSS EXAMINATION

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[503] Q. (By Mr. McManus, continuing): I still think and I want to make it clear that we are talking about the area that Autolite primarily sells or at least their largest sales is to warehouse distributors, that is correct, right? A. That is correct, sir.

Q. And at this level, I think you testified, that there is very little price competition between Autolite, Champion and A.C.? A. The differences in price are small when all are performing [504] the same functions.

Q. That's what I thought you said. Then I said at this level and I thought you said that factors other than price are the dominant factor in whether you are going to sell to a warehouse distributor, is that correct? A. If I said that, I didn't mean to say it quite that way.

Q. Correct it then. A. The other factors are significant factors and no one factor is totally dominant in my judgment in this area. I believe I mentioned the supply capability, the promotion and sales support, missionary help, other types of things are significant factors. I don't believe that any one factor, however, is totally dominant over all other factors.

[505] Q. Well, are the other factors more important as a whole in price competition or not? A. The other factors are more important cumulatively.

Q. Yes, in price. A. At the warehouse distributor level?

Q. Yes. A. I say yes.

Q. How about at the dealer level? A. At the dealer level, price competition is so intense, I would say that's probably the most dominant factor there.

Q. How about at the national account level? A. The national account level and the warehouse distributor level are essentially the same type of thing, where price is not as dominant as all of the other services rendered.

Q. So when you had stated, I believe, yesterday, that you considered the spark plug industry as highly competitive in regard to price, you would not say that was true at the warehouse distributor level, is that correct? A. It's competitive but it's not as intensely competitive as it is at the other levels of distribution.

• • • • •

[510] Q. No. I understand that the art is not all that complicated and that there are people that could manufacture spark plugs, is that correct? A. That is correct, sir.

Q. But the barriers to becoming a substantial or an important factor in the manufacture of spark plugs are extremely high; wouldn't you say that's correct? A. Extremely high?

Q. Yes. A. I'm not sure I would use those choice of words. I would say they were high.

Q. High?

The Court: Why?

A. Well, sir, because this industry happens to be oriented around the automobile industry and that orientation causes

it to be difficult for a spark plug producer to obtain a significant share of the market unless he has the original equipment association in one way or another, and that's not to say that someone couldn't compete in the market place, and I simply say it would be an extremely difficult task to enter and become a dominant factor; that is, equal shares [511] with the three producers who are in the market today.

The Court: Because of the O.E. concept?

A. Yes, sir.

That O.E. concept, as I have testified yesterday or the day before yesterday, I believe is largely customer-oriented; that is, it's not pushed through one end but asked for on the other end.

* * * * *

[514] Mr. McManus: I had indicated that if the original equipment tie—and I understand that as the tendency of the installer or the customer to replace the original equipment plug with the same brand, type branded plug—if that tie were broken and that was no longer a factor in the sale of spark plugs, would the barriers to entry into the manufacture of spark plugs increase, decrease, or remain the same.

A. As I testified, it wouldn't make any difference at the manufacturing level, but in terms of the marketing aspect, that hypothetical question, if it terminated, would, I think, tend to make it more possible for people to share in the market.

[515] Q. (By Mr. McManus, continuing): In other words, if this tie were broken you would expect that there would be a likelihood of people coming into the manufacture of spark plugs, additional people? A. I would say there would be a better opportunity to come in than exists today.

* * * * *

[520] Q. Now, taking my hypothetical facts—Mr. Shapiro was great on asking hypothetical questions so I would like to ask one. We are using that hypothetical situation. What would your position be, what would your statement be? A. My position would be that the chances of survival of the Fostoria Plant, with its capacity, would be enhanced by total dissipation of the O.E. concept.

Q. Now, the ability of the New Fostoria facilities to survive would depend in part upon the purchasers, isn't that correct? A. Oh, yes. The management would be important.

Q. And the financial ability, is that correct? [521] A. That would be important, too.

* * * * *

[526] Q. Was there a time when Ford Motor Company only sold genuine Ford replacement parts to its dealers? A. You are referring to our branding practices prior to the acquisition and prior to the time we went into the Motorcraft Program. We sold parts under the brand name FoMoCo during most of the 1950's. We also sold under the brand name Mercury. We sold under the brand name Edsel. We sold under the Lincoln brand name in those early years, however.

Q. And this was only to your dealers? A. Only to our franchise dealers. Those parts were not made available to anyone outside the franchise dealer organization.

Q. You sold no parts then in the early '50's to independent warehouse distributors, is that correct? A. Not until 1958.

Q. And what was the purpose of Ford Motor Company confining its sales of replacement parts only to its dealer organization? A. I believe that was largely historical. That's the way the company started out in 1903 and the

task of building a solid franchise dealer organization was such that in the judgment of the company the greatest strength lay in providing that organization with both the, providing and charging that organization with both the servicing and selling of the new vehicles.

Q. Now in addition per unit sold, wasn't it more profitable for [527] the Ford Motor Company to sell directly to its dealers than it was to put its parts into the independent aftermarket per unit sold? A. Are you speaking of the early history now or are you speaking today?

Q. I'm talking about at the time when they limited their sales only to dealers for genuine parts. A. Knowing what I do today I would anticipate that it was probably more profitable to sell to the dealers, but I do not really know the historical pricing pattern in the '20's or '30's or '40's in this field, so I really can't answer that with great definity.

Q. In a sale to a dealer at that time you skipped a couple of the intervening distributors, like the warehouse distributor and the jobber. A. It was a single transaction direct to the installer.

Q. So the sale is more likely to be profitable? A. There is less distribution costs, in other words.

Q. Right. So then you said at about 1958, I think you said, Ford decided to make some change in this program of limiting its genuine parts only to the dealers or did it? A. Yes.

Q. Did it or did it not? A. Yes, we did in 1958 as the result of a rather comprehensive study undertaken at the request of Mr. Ford. The company [528] found that its share of the parts service market through its franchise dealers was slipping, that is, the dealers were not servicing the same percentage of vehicles they had been the decade earlier. At this point, if I recall, the studies revealed that

the dealers were servicing about 20-25 percent of the vehicles; that meant that 75 percent were being serviced by other than the franchise dealers. Under these circumstances it was increasingly difficult for a Ford owner to obtain genuine parts from the independent. Three out of four were dependent on procuring the parts from some other source. This at times caused problems, lack of parts availability made it difficult for the owner to get good service, and in the interest of our vehicle sales we felt that we should offer the best possible availability of service and parts to those owners.

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[529] Q. So then you made a decision to do what? A. In 1958, as a result of this study, the company decided to create two programs. One of them was called the CarLite Glass Program, which actually didn't start selling in the market 'til 1959, but under that program we—

The Court: What did you call that?

A. It's CarLite Glass, your Honor, C-a-r-L-i-t-e.

Under that program, we sold glass to distributors who, in turn, sold glass to the independent installers of windshields, side lights, back lights of the vehicles. We did this because our studies had revealed that we were obtaining a very low share of the market and there was not always ready availability of Ford—of glass to fit Ford vehicles.

We also, at that time, made the decision to enter the parts aftermarket through a program that we called Motorcraft, M-o-t-o-r-c-r-a-f-t, one word. That program was launched in, I believe, the summer or fall of 1958, and it progressed through 1959 and 1960 until 1961.

Q. (By Mr. McManus, continuing): What products were you selling under the Motorcraft brand? A. The Motor-

craft Program was a very limited line. We did not sell spark plugs, for example, or batteries under the Motorcraft Program. Just started out with some transmission [530] parts, some bearings, a few other miscellaneous parts, but it was a quite small program, very limited line.

Q. Was it your intent—

The Court: That Motorcraft Program was—how was that handled?

A. That was handled through warehouse distributors, your Honor, much the same as the present Autolite program is handled. Fewer number but the same basic channel of distribution.

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[536] Q. So that if they [Ford] had not gone in by this acquisition in '60 or '61, it's your feeling that they would have gone into the manufacture of spark plugs and batteries at some reasonably near future date? A. It's my opinion that we would have continued to look at this market. In a growing market there's always the question of re-evaluation of decisions in any business climate and the market that's continually growing would certainly offer some opportunity to get in that market at a subsequent date.

Q. Well, looking at the market in the last 10 years, '60 to '70, but for this acquisition, with your knowledge of the company, do you believe that they would have gone into the manufacture of spark plugs and batteries? A. I can't forecast how the Board of Directors might have reacted to this, Mr. McManus. It is my view that continuing studies might have shown it to be an economic decision to make, but whether they would have made that election or not I really can't say.

[537] Q. What would your recommendation be? A. I might well have recommended that we get into the manufacture of spark plugs. I think it's highly questionable whether we would have entered the manufacture of batteries.

Q. Now just on another definition matter, you consider warehouse distributors as the independent aftermarket. Are they the total independent aftermarket? A. Warehouse distributors are the most dominant avenue to reach the consumer in the independent aftermarket but they're not the only one.

Q. But dealers, what are they? Are they the dependent market? What's the term for them? A. No dealers are independent insofar as their purchase of these type of product are concerned. They certainly may purchase from other sources than Ford Motor Company and do.

Q. So that at least in theory, they are just as independent to purchase as any other member of the replacement market? A. Not only in theory but in practice they purchase from other than us.

Q. Now, if I could direct you to the Ford Exhibit FR-1.

Now, if you could help me on this a little bit, you've got the line there that says, "Accounts handling Motorcraft line prior to acquisition." A. Yes.

Q. And in 1968 that was represented, 13.8 percent of all sales [538] of Autolite spark plugs in the after—independent aftermarket? A. This is just warehouse distributors, sir, yes.

Q. Not the dealers or the— A. Not the dealers, not the national accounts.

Q. Right.

Now, the next column said, "Acquired accounts not handling Motorcraft," and that figure is 18.6 percent. A. Yes.

Thomas C. Page—Cross Examination

Q. Now as I understand, the first line are companies or warehouse distributors that you had obtained under the old Motorcraft Program? A. Yes. Well, we don't acquire warehouse distributors. We have sales agreements with them.

Q. Well, sales agreements. A. Yes. And they may have sales agreements with, you know, 20 other manufacturers, too.

We had agreements with these people to sell the Motorcraft line of products prior to the acquisition.

The second line are those warehouse distributors who were made available to us in the acquisition in which we re-assigned to a new Autolite agreement, and in 1961, those were the two basic categories of customers that sold the Autolite spark plugs for Ford Motor Company.

[539] Q. So as I understand it, the second line are the warehouse distributors that you were able to sign up as a result of the Autolite acquisition? A. Yes, sir.

Q. And going down, the other accounts were all added on 12-31-61 or thereafter? A. Subsequent to that, yes, sir.

Q. So that all of these accounts, the ones after 12-31-61, which represent approximately 67.—represent 67.6 percent of your spark plug sales were all added after this suit was filed? A. Yes, sir, that's correct.

Q. And in 1968 you have a figure there of 17.5 percent? A. Yes, sir.

Q. And that percentage here, at least some of those sales were added after the decision was made in this suit, finding a violation of the Clayton Act, would that be true? A. The 1968 acquisitions, yes, were subsequent to the—

Q. Finding by the Court. A. Finding by the Court.

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[542] Q. So that one of the purposes of branding these parts under the hood of [with] the Autolite name is the hope that you could convince the installer to replace with the same type Autolite parts, correct? A. That's correct.

Q. You are attempting here to put the same type of tie-in as spark plugs have today, is that correct? A. Yes, that's the same—

Q. That's what you would hope? A. That's the objective.

Q. Now, is this consistent with your testimony, that Autolite was pushing an all-make concept in attempting to break the O.E. tie? A. Yes, I believe it is, because the all-make concept is simply an extension of that which we had done under our own—on our own vehicles to the other vehicles on the road today. [543] Although we did not have original equipment branding on those vehicles, we at least had a complete line of products for that jobber or that warehouse distributor or that retailer to install, and he could keep an orderly progression of parts. There are some parts that are actually interchangeable between car lines so that it made his stocking more convenient, his ordering more convenient and his ability to buy from a single source better.

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[548] Q. So your program of selling in the aftermarket is really twofold; it's all-make to the extent that anything you can pick up from G.M. and Chrysler is gravy, and at the same time you are aiming so that you will retain all the replacement business on Ford automobiles. Is that correct? A. That's correct.

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[572] Q. I now like to refer you to Ford Exhibit FR-9B, entitled, "Jobber Topics, August, 1969."

Now, is that an advertisement that goes to the trade? A. This is a trade ad, yes, sir, the Jobber Topics.

Q. All right. Now, it reads:

> "Most of the 24 million Ford-built car and truck owners already know where to go for replacement parts—straight to their nearest Autolite retailer, but we won't [573] be satisfied until every last one, plus the millions of new Ford owners in years to come, know where to go and insist on Autolite original equipment parts. So, we're beefing up our program to spread the word about Autolite quality. There's a special Autolite warranty booklet in the glove compartment of every new Ford Company car and truck.
>
> "Under the hood, the Autolite name is hard to miss. This year there's more Autolite advertising in Ford Times, reaching 1,500,000 Ford owners every month and on TV, radio and in national magazines."

Now wouldn't you consider that an O.E.-oriented ad? A. No, I wouldn't because the intent of this ad, even though it may sound O.E. in nature, the intent of this ad is to encourage the jobbers to carry our line of products, and we're simply telling him that he has some help in the field insofar as Ford owners are concerned by the fact that we've advertised in Ford Times, but it might have some O.E. appeal if he happened to be driving one of our products, the jobber personally, but that certainly was not the intent of our ad.

Q. As I understand the all-make application, you would be talking about selling parts for G.M. and Chrysler? [574] A. We would, yes, sir.

Q. There's no mention in here about selling any parts to G.M. and to Chrysler. A. No, that's true, because the

intent of the ad is to attract the jobber to our line of products there and we're simply using, as one of the vehicles for attraction, the fact that we do work with the original equipment owners, but the Ford Times does show up in this ad but there's also many other pieces of advertising here that are not directly related with the big ad or the Bardahl boat on the bottom, for example, was in a center section of Life Magazine and that did not—was not an O.E.-oriented.

Q. The automobile in here, of course, is a Ford product, isn't that correct? A. We are inclined to put our products in our ads, yes, sir.

Q. That's right. And the spark plug's right next to it? A. That's right, yes, sir.

Q. And the fact that you say:

> ". . . most of the 24 million Ford-built car and truck owners already know where to go for their replacement parts—straight to their nearest Autolite retailer."

Now, that to me seems like an O.E.-oriented ad. [575] A. Well, I assume that if you were an owner of a Ford car, you might interpret it that way.

Q. I'm not. A. But that was not the intent of the ad. The intent of the ad was to attract a jobber to carry our line of products and we're simply trying to entice him to do that, telling him that we do a lot of things for him at the retail level that would assist him if he carried our line of products.

Q. But what are you saying is that you've got all of the —you've got the 24 million vehicles and you've got the Autolite warranty booklet in the glove compartment of every new Ford Motor Company car and truck, under the hood, the Autolite name is hard to miss and the fact that

you got 1,500,000 car owners who receive the Ford Times every month, and it's hard for me to believe that this is—is other than an O.E.-oriented-type ad. A. Well, Mr. McManus, you can classify it as you see fit. To me, the intent of the ad was very specific, and it was to attract jobbers to carry our line of products.

The fact that it happened to be Ford-oriented is simply part of our way of selling that concept to the—it's true that the items, there's a Ford car in there and there's Ford products and everything shown here in physical product is one that's produced by Ford Motor Company. But I think the important thing is: What's the intent of the [576] ad as opposed to what the ad says. The intent of the ad is the appeal.

[577] Q. It's the 'A' people tying in the— A. Yes.—

Q. —Ford products—the Autolite product with the Ford automobile? A. But that's part of our appeal to the jobber. If he had no association he would become even less interested in our product than he is today.

Q. Now, if I refer you to FR-10D— A. 'D', did you say?

Q. 'D'. A. 'D'.

The Court: 10D?

Mr. McManus: 'D' as in dog, your Honor.

The Court: 'D'.

Q. (By Mr. McManus, continuing): That; I would consider obviously an all-make type of ad. A. Yes.

Q. Wouldn't you? A. Yes, I certainly would. Well, it's a Chrysler product ad but it's an all—a non-Ford ad.

* * * * *

[584] Q. Now, if I could direct your attention to FR-11. You indicated that you are now, and have, I think, for several years, advertised the all-make concept. However,

according to this table as I see it, replacement sales of Autolite spark plugs between 1966 and 1968 for O.E., they went up from 70.9 to 75.2 percent; is that correct? A. That's correct, yes, sir.

Q. Why is this? Do you have an explanation for it? A. Yes. I think there's two factors that are significant here. One of them is that the number of cars on the road that are equipped with Autolite plugs have of course increased in each succeeding year from 1961 on, and the number of Chrysler cars have been decreasing during those years. So, of course, the original equipment mix tends to be higher and higher than the Autolite application. Therefore this tends to rise. [585] That's fact number one.

Fact number two is, it's extremely hard to penetrate the non-Ford market, because General Motors is, through their A.C. Division, has a very entrenched position, and despite the efforts we put into this and the money we have expended for it, we have not been terribly successful in penetrating the General Motors' share of the market.

Q. My understanding is, am I correct—the figures that I am talking about: isn't that the percentage, the ones I have told you, the percentage of Autolite plugs for Ford vehicles? A. Yes, the Autolite applications for Ford vehicles has been rising as a share of our total sales. Therefore, the sales for G.M. and Chrysler has been decreasing during this three-year period that you inquired about.

Q. Now, let me see if I have this straight.

This would apply only to Ford applications, wouldn't it? A. Yes.

[586] Q. In other words, in 1966 the number of Autolite plugs on Ford vehicles— A. No, these are replacement sales now. These are not installed on the vehicle.

Q. I'm sorry, that is correct. That's 70.9 percent of Ford vehicles replaced with Autolite plugs? A. No, the 70.9

represents that share of our total replacement spark plug sales that were designed to fit Ford cars.

The Court: What is that again now?

A. The 70.9 percent figure in the right-column, your Honor, represents that share of our total spark plug sales that were designed to fit Ford cars. The converse of that, or roughly 30 percent, were sales to fit non-Ford vehicles, Chrysler, General Motors, American Motors, et cetera.

Q. (By Mr. McManus, continuing): And then by 1968 that had increased to 75 percent? A. Yes, sir, despite our all-make approach, were sales, Ford applications keep rising.

The Court: And you gave two reasons for that?

A. Yes.

The Court: One of them was, you said, I think you had trouble penetrating the General Motors market?

A. That is right.

[587] The Court: The other?

A. The other was because the number of Ford cars and trucks that are in operation keep rising, and the older cars that were equipped with Autolite and for Chrysler back in the fifties keeps declining. Those cars are being scrapped and therefore there are fewer and fewer of them on the road to have the O.E. application apply.

The Court: This 25 percent of the cars on the road, does it make Ford No. 1 on the road?

A. No, sir, your Honor, General Motors has roughly twice that many cars.

The Court: How about Chevrolet?

A. No, sir, unfortunately, Chevrolet has more cars on the road than there are Fords.

The Court: Do you know what percent Chevrolet has on the road?

A. Chevrolet alone, your Honor, is probably closer to the Ford Motor Company total of about one out of four cars on the road today. The Ford share on trucks is somewhat higher than that. I think we are roughly one out of three on trucks and we are one out of four on cars. The Chevrolet division alone in some years has actually outsold Ford Motor Company total car sales.

The Court: I don't mean the car sales, these figures that you gave us another testimony I think [588] indicated cars on the road.

A. There are more cars on the road bearing the Chevrolet brand than any other brand today, sir.

The Court: Do you know what percent they are?

A. No, I don't know specifically what share they have.

* * * * *

[593] Q. (By Mr. McManus, continuing): Now I think there has been testimony here in the record that at least in the tune-up phase of the sale of spark plugs, that filling station operators and purchasers are not overly sensitive to the price of the spark plug. Would you agree with that statement? A. For those people who shop at the service station, I would say they are not particularly sensitive to the price of a spark plug. I think there is some evidence, however, that people are sensitive to the price of spark plugs, otherwise, the discount houses and many other locations wouldn't be selling in the volume they're selling today.

Q. Now, it's true that a—at least as I understand it, with the O.E. tie, the filling station operator would normally put in the same plug as he took out even if there was a limited variance in price, 5 cent variance in price. Would you feel that was true? A. I think he has a strong tendency to do that, yes.

Q. Do you know what change in—how much variance there would have to be between spark plugs to make the filling station operator shift from one brand to another? A. Change in his procurement price, you're asking now?

Q. Yes. [594] A. No, I really don't know how much change specifically, but I would say that it would have to be substantial to cause him to take that judgment.

Q. Yes. Now, if—

The Court: Can you translate that to money? How many cents?

A. Well, let me put it in perspective this way: If the price is—suggested dealer price today is 72 cents, for example, on Champion, A.C. and our own plug, the fact that he can buy them, say, for 49 cents at the discount house causes some station owners to go over there and buy them, so I assume that's enough motivation, which would be twenty-three, four cents. Whether he would continue going over there if they were 59 cents, I don't know, your Honor. I presume some might be influenced at that level.

I think it's an individual judgment that the service station man would have. If he could buy them for 72 cents from the jobber and 69 cents from the discount house, I doubt if he'd walk across the street.

Q. (By Mr. McManus, continuing): If the general public and the filling station operator became convinced that one make of spark plug was as good as another, would this variance in price be for getting him to change, would it be

less or more? A. If the station operator felt that there was no difference [595] whatsoever and he became convinced of this, and I don't know how you'd do that, but if he did, I presume he would be more sensitive to a price differential.

The Court: Now, you say, "if he," you mean—

A. If the installer—

The Court: If the installer or the operator of a station—

A. If the installer or operator of a station, yes.

Q. (By Mr. McManus, continuing): If he became convinced of what? A. If he became convinced that there was no difference in the product and he had complete confidence that any plug he put in did the same job, then I think he would be more sensitive to a price differential.

The Court: You don't think he would have to be convinced that the owner of the car would realize that?

A. I think he would have some apprehensions about the owner of a car as well, but if he were personally convinced that it was an equal product, then I think he would be more sensitive and be more inclined to sell the owner on the fact that he could install Champion instead of A.C. My concern is that I don't think that you can convince him of that.

[596] (By Mr. McManus, continuing): It is in the economic interest of Ford Motor Company and General Motors and A.C. and Champion to keep the filling station operator convinced that the best plug for their car is the one that the original equipment manufacturer makes; that's correct, isn't it? A. Yes, sir.

Q. I gather from the fact that Ford makes an all-make product in the spark plug field—as I understand, you make

a spark plug for all domestic automobiles? A. Yes, and some foreign.

Q. But at best for all domestic? A. Yes, sir.

Q. In your mind, is the Autolite spark plug that you make for General Motors' products as good as the spark plug that General Motors makes for its products? A. I believe that the quality of the spark plug we make for General Motors application will serve the vehicle as well as the A.C. spark plug will serve that vehicle.

Q. Would you say the same thing in regard to Chrysler? A. Yes, I believe our spark plug is equally good to a Champion or a MoPar plug for Chrysler application.

The Court: Do all of the Big 3 make all-make line spark plug?

A. Yes, sir. A.C. has an all-make line of spark plugs, your [597] Honor, and it's my belief that they also have it for most, if not all, foreign cars: and Champion produces the extended line as well, covering all U.S. makes and I believe virtually all, if not all, foreign imports in this country.

Q. (By Mr. McManus, continuing): And, of course, I assume your answer would be the same in regard to American Motors, is that correct? A. Yes, sir.

Q. Now would you say that the spark plug that A.C. makes for Ford automobiles is as good as the one that Autolite makes for Ford automobiles, realizing your sales position? A. If you assume that it's the right plug, the right application, I think there's reason to assume that they produce a high quality plug, yes, sir.

Q. Would you say the same thing about Champion? A. Yes, I think Champion is a quality producer.

Q. And produces a quality plug for Ford automobiles? A. For all makes of automobiles.

Q. All right, fine.
And A.C. does the same? A. Yes.

The Court: Are you familiar with the factors that must be taken into consideration in engineering a spark plug for a particular motor?

A. Yes, I'm generally acquainted, your Honor, with the [598] factors involved.

The Court: What are those factors?

A. Well, the key—I'm not an engineer and I probably won't use engineering terminology here.

The Court: No, I understand.

A. But the key factor involved is to get the plug to fire at the optimum time for the combustion of the gas mixtures that are in the chamber, and this involves varying heat ranges of firing, the extension of the plug into the combustion chamber and—

The Court: Now wait a minute. Those involve what again, now?

A. It involves getting the plug to fire.

The Court: At the right time?

A. The appropriate time with an adequate amount of spark so that you get full combustion in the cylinder chamber. The plug itself, of course, must be so positioned in the car that, that is, deep enough into the chamber so that you, in fact, get the firing at an optimum point, and I'm sure there are many other technical aspects.

The Court: When you say, "deep enough," depending upon the combustion chamber and design and all that sort of thing?

A. Yes.

The Court: In one engine the firing [599] position might be higher than another?

A. Yes, sir.

The Court: And that all depends upon the design of the combustion chamber and that?

A. That's right, sir.

The Court: And the amount of ratio of compression and all that sort of thing?

A. Mixture.

The Court: Mixture.

A. All in there. That's why it takes nearly three hundred different spark plugs to service the number of cars in this country.

The Court: It does take that many?

A. It takes approximately 300. I'm not sure of the total domestic market but it's a substantial number.

The Court: When you say, "the domestic market," you mean what?

A. Cars that are produced in the United States.

The Court: Now being produced?

A. Well, no. I mean—

The Court: Or on the road?

A. Well, the cars that are on the road today in the United States, yes.

I probably should expand. I'll say cars and trucks because many of these spark plugs are [600] interchangeable between cars and trucks.

Q. (By Mr. McManus, continuing): These factors that the Court was talking to you about are factors that Ford Motor Company has to consider in manufacturing plugs for themselves and also in manufacturing plugs for any of the other car manufacturers, is that correct? A. Yes, that's true.

The Court: Are you familiar with the amount of time that's being required to engineer a spark plug for a particular engine for, let's say, a new engine or a change in a design of an engine?

A. Well, your Honor, I think the amount of time involved depends on both the—what they're trying to do, whether it's an existing engine that they're modifying or whether it's a brand new engine.

In the case of a brand new engine, that is, where they're designing a brand new engine, the product design development may be up to five years.

In the case of a modification for a given engine or a change in compression ratio or fuel-air mixture or many of the other factors that are considered, it could vary from perhaps three months to two years in the development time. But, in any event, a substantial amount of testing is required, both hot cells testing and on-the-road testing of the vehicle and, of course, that [601] testing is increasingly complex today with the pollutant problem that we're facing, so that there are many, many facets of matching the spark plug to the combustion ratio to the engine to the exhaust system and so forth. That's why our timing cycle on testing is so exceedingly long today, sir.

[602] The Court: Is the timing cycle, would that apply also to the spark plug manufacturer that doesn't have access to the development of the modification or the new engine?

A. Yes, sir, one of the real handicaps that any manufacturer has in fitting his spark plugs to the market is that he has to wait until this is done and then he tries to copy, you know, what has been done by the original equipment manufacturer. So very freqently the replacement spark plug is not available on the market at the same time that a car comes out new, and there may be a lapse of six to 12 months. This is not a particular marketing handicap because you don't have a tune-up anyway for six months to 12 months and this gives them time to copy. If they are extremely accurate in copying they can duplicate the original plug. If they do a sloppy job, they probably produce a poor plug.

The Court: They take a plug out of a new vehicle and try to match it?

A. Try to match it, yes, sir. It does take testing because manufacturing processes are different, even if you copy it directly on paper, producing it to be exactly the same may be difficult. There are metallurgical problems in that and ceramic problems in the plug; so it's not as simple as saying, "Take this one and make one just like it." There are many complex factors to this.

[603] Q. (By Mr. McManus, continuing): The Autolite division has not had any difficulty in making plugs for, say, General Motors cars within the periods of time necessary, when plugs for the new cars become necessary? In other words, I think you explained it correctly. It takes about six months, eight months for you to make a Chinese copy

of an A.C. plug. Is that a fair statement? A. No, that is not. We have had some difficulty in some cases. In some cases it's relatively easy to provide the plug. In other cases we have been as late as a year and a half to two years in succeeding in producing this plug. We try not to hurry our efforts.

First, the market isn't very big anyway at that point in time. Second, we want to be certain that what we do finally decide to maket is a high quality product. We are not out to injure the owner of a General Motors car by putting a poorly designed plug on the market place or any other brand of car.

Q. I understand. A. The time varies. Some of them are easy to duplicate. Some are difficult. In today's high compression ratios it gets increasingly difficult to do that. I am sure the A.C. Division of General Motors and Champion face exactly the same problem we do.

Q. Normally you are able to get your all-make plug out in time [604] to satisfy the demand?

The Court: The replacement demand on a new car?

A. Normally we are on cars. Some of the marine applications and some of the others we have been a little bit behind on for failure to have developed this in time, but in the case of cars I do not know of any case where we have been substantially behind the market.

The Court: That average time would be what?

A. Oh, within a year, your Honor.

Q. (By Mr. McManus, continuing): If I could refer you now to Exhibit FR-14 and this is the Carter Manual. I see that in their advertising that the net cost to them is 41.5 cents for Autolite spark plugs based on the 5/1/69 price

sheet, is that correct? A. That's Carter's price to their customers. That's not our price.

Q. This is the price that Carter is selling to their customers? A. To their customers, yes, sir.

Q. And now I am reading from FR-13. As I understand it, the lowest acquisition costs to a W.D., warehouse distributor, in 1969 was 39.98. I'm having trouble with those figures again. How do you say that? A. .3998 dollars.

[605] Q. .3998 dollars? A. Yes.

Q. So that the difference between your price to the warehouse distributor and the Carter price was just a little bit over a cent and a half, is that correct? A. Yes, that is correct.

The Court: Wait a minute. What is that question?

Mr. McManus: Your Honor, they were, Autolite was selling spark plugs to warehouse distributors in 1969 at the price of .3998 dollars.

The Court: Yes?

Mr. McManus: Carter was selling to their customers—

The Court: 42.5?

Mr. McManus: At 41.5 which is a little over a cent and a half difference.

Q: (By Mr. McManus, continuing): One, could you tell me where Carter would be likely to get the Autolite spark plugs? A. Well, it's my belief that Carter buys from more than one of our warehouse distributors, Mr. McManus. I expect that they buy from at least one or more than one in the New York area and one or more in the Chicago area. The reason they are able to offer these things at this price is that they have purchased, they work on very small margins. Secondly, the [606] warehouse distributor is willing

to work on a very small margin because this particular product is intensely competitive at the warehouse distributor level. We find that our warehouse distributors from time to time sell them as low as on a 1 cent margin. Frankly, I don't know how they succeed in doing this but they do work on that level at times, and I presume that is how they were able to offer these at 41.5 cents a piece.

Q. Then there is a possibility that the warehouse distributors, if they have a sufficient enough volume, may sell to the jobbers at a price under 41.5 cents; is that true? A. Yes, there is a possibility. I think that's unlikely because of the relative volumes of the two but its conceivable it could be that way.

Q. And depending on the volume they might only make 2 or 3 cents rather than just the one and a half cents? A. That's right. Other factors enter the discussion because there are credit terms and shipping fees, and all of these things that get in there and that would affect the price that goes to a jobber.

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[611] Q. Fine, thank you.

And if there was no O.E. tie whatsoever that all plugs were all-make and the dealer was not concerned about which one he put in, would it be your opinion that he might switch brands for 9 cents? A. If there were—If in your hypothetical example there were no O.E. associations available to him, price would become a more significant factor, yes.

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[617] Now, Mr. Page, as I understand it, Champion, at least in the automotive aftermarket or automotive parts field, would be considered a single product company, is that correct? A. Yes, basically they are a single product company.

Q. My understanding is that they have about 12 percent of the O.E. market, is that correct, approximately correct?

The Court: 12 percent of what?

Mr. McManus: The O.E. market.

A. Of their original equipment on a share of Chrysler production, but I do not know the extent of Chrysler production that bears Champion versus MoPar, so I really can't say specifically it's 12 percent, but it's a relatively low share of the original equipment market.

Q. (By Mr. McManus, continuing): Well, Chrysler has about how much of the automotive market? A. Well, typically they are in the 15 to 17 percent range today.

Q. So that Champion's share of the market would probably—could be, say, at approximately 15 percent, in there? A. Yes.

Q. Give or take a percent or two, is that correct? A. Yes.

Q. Now, could you explain to me why a single product company, with only 15 percent of the O.E. market, are successful [618] in capturing approximately 40 percent of the spark plug market?

I think that's correct or approximately correct, isn't it? A. Yes, sir.

Yes, I believe that Champion has achieved and has retained a relatively high share of the market, for two primary reasons.

One, because they started back many, many years ago and have a tremendous history of success behind them, and in fact they were original equipment on many, many cars in the early years there, even though their share of original equipment market has dwindled in recent years they had enormous momentum in a great number of cars, and a great number of mechanics and people in the trade have known Champion as original equipment for years and years. So they had much momentum going for them.

The second factor is that they are a very aggressive organization with high technical competence and high manufacturing competence.

The Court: You say their percentage of the aftermarket is what, 40?

Mr. McManus: Approximately 40 percent, as I understand it.

[619] A. Yes, sir, that's correct.

Q. (By Mr. McManus, continuing): Would that be—40 percent would be percentage of the aftermarket or would it be a percentage of the whole market? A. I'm speaking of the aftermarket, 40 percent of the aftermarket.

Q. All right. Well, then, is it my understanding that although the O.E. tie is extremely—has been extremely important in sales, in the independent aftermarket, that a strong sales organization can overcome this to some degree, and in Champion's place, a reasonable satisfactory degree? Is that a fair statement? A. Yes, with the momentum Champion has they have been able to sustain themselves during the period of time. But Champion's share of the market today is less than it was years ago.

Q. Oh, yes. A. So they have obviously not sustained themselves totally in the market, even with their great momentum.

Q. But if I understand you, what you are saying is that a good O.E. tie and a good reputation in the past, together with an aggressive sales organization, can make substantial inroads in the tendency, the O.E. tendency, is that correct? A. I would say that Champion has been successful in retaining a good share of the market despite their dwindling O.E. [620] application share. Whether another company could do that or not, I guess, is a matter of what their starting point is and the climate that they're dealing in today or in subsequent years.

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Testimony of Earl R. Fiene, Vice President and Director of Marketing, Prestolite Division, ELTRA Corporation

DIRECT EXAMINATION

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[663] Q. So that as I read this, the total net sales of the corporate entity which used to be the Electric Autolite Company and is now Eltra, have increased from approximately 222 million dollars to approximately 430 million dollars, is that correct? A. That is correct.

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[666] Q. In other words, your electrical group, your battery group, your wire and cable group, are all ahead today of what they were in 1960? A. Yes, sir.

Q. Now, with respect to profits of Eltra, are they attributable to these product groups in approximately the same proportions as the sales are? A. In total, yes. Without going into breakdown because of the variables within the group, yes.

Q. Yes, I am speaking now about the total. A. Yes. More than 50 per cent.

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[669] Q. Do you have facilities for the manufacture of spark plugs? A. We have three producing facilities: Decatur, Alabama; Reading, Pennsylvania; and Sarnia, Ontario.

Q. How many people are employed at your Decatur Plant? A. In the classification of hourly and salaried, we have over 900, more than 900.

Q. How many of these salaried and hourly people are employed in spark plug production? A. Twenty-five percent.

Q. Approximately how many would that be, in— A. It would be about 250 some people.

Q. How many people are employed in spark plug production at your Reading Plant? A. That plant is strictly spark plug and we have 105 hourly and salaried.

Q. And how many people are employed in spark plug production at your Sarnia plant? A. Out of 530 some, at last count 60 are involved in spark plugs.

The Court: Let's see. The number in Decatur—

A. Is 250.

The Court: But devoted to spark plugs?

A. 258.

The Court: 158?

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[670] Q. (By Mr. Shapiro, continuing): Mr. Fiene, without stating aloud any of the figures contained in FRC-32, would you generally describe what it contains? A. Yes. This shows that we are an approved source at Ford of Canada in terms of original equipment application. The time and money and procedure involved to get O.E. approval is very involved. It takes a lot of time, a lot of comparison of performance and so on. This indicates that we have that approval and the same holds true at Chrysler of Canada on certain of their original equipment engines. We have no longer—we don't have approval currently on passenger car O.E. However, because of our past history with them, we could considerably shorten the time span to get engineering approval or get reinstated. [671] We estimate that would take us from three to six months.

Then, for further elaboration, we show in 1969 the volumes that we sold to Ford of Canada under the Autolite

brand for their replacement requirements, and we sold to Chrysler two brands, one Chryco, which is a brand that we have introduced into the Canadian marketplace in their efforts to obtain national account business—they have tires, batteries and other elements of the basic line in the Chryco program—and they also have a AutoPar brand.

Q. Now, apart from Sarnia, does the Prestolite Company have spark plug manufacturing capability and expertise in the United States? A. Yes.

Q. Where are these resources located? A. Decatur, Alabama, and Reading, Pennsylvania.

Q. Do you consider your spark plug know-how to be good or in what way would you characterize your own spark plug manufacturing know-how? A. That we are very expert. We have considerable residual talent from the Electric Autolite identity. We have all of the basic engineering and research capability in terms of our rating engines, dynamometers and so on.

"Excellent" is the word that I would like to use.

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[674] We have not sold since 1964 spark plugs to Ford Motor Company. We have been dependent on Ford Motor Company for components in our spark plug efforts, and that has continued and is in effect currently.

Q. In other words, you have been buying something from Ford Motor Company. A. Yes, sir.

Q. What have you been buying? A. We buy two of the major elements. One is the insulator, or the ceramic, where we are totally dependent on Ford Motor Company, and then we buy a percentage of the steel body or shell from Ford Motor Company.

Q. When you use the word "dependent," Mr. Fiene, do you mean that you are buying your total requirements, or do

you mean that there is no other source that you could use? A. I would like to qualify, since December of 1968 when we acquired the spark plug assets of General Battery and Ceramic, and I think it was stated earlier we bought the company; that is not so. We bought just the spark plug activity and with it we got some ceramic capability. However, not to the point of self-sufficiency.

Now, when I say "dependent," we had attempted and did buy some insulators from Japanese sources. We found, however, that the lines of communication, the [675] lines of supply left us a little vulnerable. The quality was excellent. We have not attempted to contact other suppliers of ceramic, which would be basically the A.C. Division of General Motors or Champion Spark Plug.

Q. So you have been buying ceramics from Ford for spark plugs and also shells for some period of time; is that correct? A. Yes.

The Court: You have been buying a hundred percent of your insulators from Ford, is that right?

A. Yes, sir, qualified to the amount now that we are getting out of the capability we bought from General Battery and Ceramic, which is modest, however, in terms of our total.

The Court: And you bought a percentage of—what do you call them, shells?

A. The steel body, the hex body.

Q. (By Mr. Shapiro, continuing): Does Eltra supply any other products to Ford Motor Company, automotive products, other than spark plugs, which they are not supplying now in any current relationship of supplier-customer? A. Yes. Ford is our second largest customer in terms of total dollar volume, and we supply them with a broad

variety of other parts than spark plug—we supply no plugs, so it has to be other than that.

The Court: You say Ford is your second largest customer of—

[676] A. Of our broad line of products.

The Court: Of your broad line?

A. Yes, and I can identify these. This would be batteries, die-cast pieces, wire and cable, some gray iron castings. They would buy electrical components like some windshield wipers, some distributor components, contact sets, rotors, caps, things of that kind.

The Court: When did Eltra buy the spark plug division of General Battery and Ceramic?

A. In December of 1968.

Q. (By Mr. Shapiro, continuing): Mr. Fiene, has the fact that Ford Motor Company has been a substantial customer of Eltra presented Eltra or deterred Eltra in any way from competing aggressively and vigorously with Ford Motor Company? A. No.

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[701] Q. Do you supply any original equipment spark plugs to International Harvester at the present time? A. It would be a very modest number. We are engineering approved and qualified and listed in their—well, the catalog wouldn't be apropos of their O.E. interest but there will be notes that will specify type of equipment. This is not restricted to spark plugs. It could be tires and other things, so we supply them a very modest number, however.

Q. Who is their principal O.E. supplier at this time? A. Champion spark plug, and they buy a reasonable percentage from AC.

Q. Do you know what price Champion is now charging International Harvester for original equipment spark plugs? A. I know the range and this is subject to change within the next 60 to 90 days. It's currently six cents and will move upward.

Q. In 60 or 90 days? A. Yes, sir.

Q. To what price? A. Ten cents.

Q. Now if you had an arrangement such as the one contemplated by the Ford proposal, would you be in a position to compete with Champion for original equipment status at International Harvester at the ten-cent figure? [702] A. Yes.

Q. Without the Ford proposal, would you be in a position to compete with Champion for original equipment status at Harvester at the ten-cent figure? A. The answer in broad sense is no. The counter, the alternative, the alternate to that would be what kind of a marketing relationship would develop in terms of the replacement as counterbalance to the O.E.

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[706] Q. (By Mr. Shapiro, continuing): Mr. Fiene, I note from FR-40 that Champion Spark Plugs appears to have fewer customers than the Prestolite Company does. Does this indicate the same relationship in terms of volume and share of the private label market as the number of customers would seem to indicate? A. No. They sell more units under private label than does Prestolite, and these are the prime accounts because of the competitive position and substance that they represent, they are able to pick their targets very effectively.

The Court: You say Champion sells more units?

A. Yes, sir, more units.

Q. (By Mr. Shapiro, continuing): Do you consider the private label market to be a growing market or not? A. I consider it a growing market.

Q. In light of your testimony about the preference for original equipment spark plugs, what is the basis for your expectation that the private label market will be a growing one? [707] A. I think some of the changes in marketing concept, the advent of the mass merchandiser, the direction, the philosophy and the marketing objectives that he is establishing for himself, our activity in participation in the TBA segment of the oil and petroleum industry. They have an international meeting each year in St. Louis and we are active in that meeting, and we sense the emphasis that they are also putting on what they call TBA, Tires, Batteries, Accessories. Spark plugs fall into the accessory category, notwithstanding that oil and petroleum are their basics, and then I mentioned the mass merchandiser, which would encompass the discount store, as well.

Q. Well, is there any difference in terms of freedom of choice of the installer in a private label situation from what there would be in a non-private label situation? A. Yes, there is less freedom of choice as far as the installer. In other words, in an automotive bay of any of the mass merchandisers, whether it be Korvette or J. C. Penney, there, the freedom of choice doesn't exist. They run with their brand, the foremost brand.

Sears Roebuck does offer in their service bays, as well as over the counter, the Allstate, which is their basic brand and they also offer Champion. The sales of Champion brand are modest.

[708] I don't know if Montgomery Ward offers anything beyond Riverside brand.

In the oil or the service station end of it, in terms of Atlas, which is the one that we know the best, here again

the installer, particularly in the company-owned stations, the installer will have little or no choice.

In the independent franchise agreement or the independent operator agreement or situation, he would have some freedom of choice.

Q. At what price do you sell your private label spark plugs? A. In the range of 26 to 28 cents, and when I say "range," because there are various supporting aspects related to price—how it is packaged, the kind of package and so on.

Q. There has been some testimony—

The Court: What price again was that?

A. 26 to 28, your Honor.

Q. (By Mr. Shapiro, continuing): Have you been aggressively seeking to sell private label spark plugs at that price over the last several years? A. Yes.

* * * * *

[710] Q. Mr. Fiene, are you generally familiar with the proposal that Ford Motor Company has made in its proposed decree? A. Yes, sir.

Q. Have you considered the possible effect that the Ford proposal might have on Prestolite's position and ability to compete in the spark plug market? A. Yes.

Q. What are the peculiar problems that you consider are now [711] facing the Prestolite company in the spark plug market? A. Our immediate problem, from a competitive or more competitive standpoint, has to do with developing self-sufficiency, so here we are now talking again about those pieces which we buy on the outside.

The Court: What is the answer again? Will you read that answer, please?

(Whereupon the record was read by the reporter.)

A. Now, that is—I will wait.

Q. (By Mr. Shapiro, continuing): Well, Mr. Fiene, has the Prestolite Company achieved the degree of success that you would like to obtain and feel you have perhaps the ultimate capacity under the Ford proposal to obtain without, in the absence of the Ford proposal? Have you been able to obtain that? A. No, sir.

Q. Well, can you state what problems you have faced in the market place, and in your competitive situation which have made it impossible for you to achieve what you regard as the kind of success that you could achieve in the independent aftermarket? A. Perhaps the toughest barrier to entry is the lack of O.E. identification that we have. Then you have the secondary problems of a high cost of manufacture. You cannot afford [712] all of the collateral and supporting programs in terms of advertising, point of sale promotion and field force, field sales force.

Q. Have you been able to acquire efficient low-cost manufacturing facilities in terms of your volume? A. No, sir.

Q. I think you said that you feel that your distribution in advertising has not been adequate, is that correct? A. That is correct.

Q. Has the absence of self-sufficiency in the ceramic field had any effect on your ability to make sales? A. It has a deterring effect in the sense that some of our customers, and in this case I would identify some of the licensees of Atlas or of Standard Oil who merchandise under the Atlas brand, who have indicated that they would like to see us develop self-sufficiency in terms of spark plug insulators, and we are not favorable to being dependent on overseas sourcing.

Q. Well, do you feel that if you had ceramic self-sufficiency, this would have any effect on your ability to

obtain business in the spark plug field? A. If you would elaborate and add to that the ceramic as well as the shell making capability, it would give us a lower unit cost, which would strengthen our position in the private label sector of the market. I don't feel that the matter of [713] a lower cost would necessarily bring us any of the independent wholesaler business because, again, this O.E. relationship.

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[716] Q. Now, Mr. Fiene, you testified before lunch that you were familiar with the terms of the Ford proposal in terms of a proposed judgment here; is that correct? A. Yes, sir.

Q. Now, would you state all of the factors that you consider to be favorable to your company in terms of its competitive situation in the spark plug industry? A. Based on my evaluation and discussion within our own company on the terms of the Ford proposal, it would give us physical equipment that we don't currently have nor are we able to justify, in the area of the shell or the spark plug body. We would be able to go out and buy a header, a heading machine and related tooling. This would also encompass a chucker, which is a term used to—it's a form of automatic screw machine which is a secondary [717] operation. The equipment investment here on a single piece of—on one line of this kind—we would need three lines in terms of the proposal—would be well in excess of 200 to 250 thousand dollars. This would give us an incremental cost saving, in terms of units, per unit cost, in the area of the insulator or ceramic, we would be able to—in fact, we have plans drawn to put a 39,000 square foot building adjacent to our Decatur, Alabama facility, which would give us an annual rated capacity of about 60 million insulators. This would be the latest isostatic type of approach, which is a compression

method rather than a grinding method. It's the most modern and the best, from a quality standpoint.

Then we have other secondary—not secondary, but related savings that we would get indirect, perhaps, but we would be able to cut down our lead time.

For example, currently if we have a customer that comes in—and we had this situation recently, where one of the Atlas licensees, one of the Standard Oil licensees, wanted to run a Program and had need for a substantial number of spark plugs. But if we go through our time sequence of, one, going to our supplier—in this case Ford Motor Company—and trying to get into their pattern, the lead time is extended to the point of where we were really shut out of an opportunity to [718] do business on this one before it developed. We had to move fast, and as a result, Champion was able to pick this up and provide the plugs for this licensee. The lead time, as I mentioned.

The flexibility, I think, of being able to respond, is somewhat similar or somewhat synonymous with that, in that we can move more quickly.

The other is that we just recently and almost predicated on the post exchange volume, have gotten our spark plug business into a profitable position, so that any minor slip in the cost of product in the marketplace, we would be extremely vulnerable.

[719] Q. Would you explain that? Vulnerable to whom or to what? A. Well, presently there are really two of us competing for the private label business. AC and Champion do not compete for the AC and Autolite.

I stand corrected. Do not compete for the private label business. So we are faced with the competitive position of Champion, who are efficient low-cost producers, and we don't have all of the tools to do the job as efficiently and as competitively at as low a cost as they are able to.

So, that, for example, if there's a shift of, perhaps, even a few pennies at the selling price at the private label level, we would be extremely vulnerable to deciding whether we should or should not stay in the spark plug business.

Q. What effect would the Ford proposal have on Eltra's position vis-a-vis Champion in the private label business? A. With the acquisition of the three set-ups, the three lines of headers and chuckers, with the establishment of an efficient ceramic capability; we would reduce our piece part, our product cost to the point of where we could in effect stand off a shift in prices if such a thing, a price war or price reduction were developed, we could stand up against that in terms of Champion.

Q. Well, you can stand up against it to the extent of the lower cost; is that what you meant? [720] Q. That is correct.

Q. Now, the Ford proposal provides that if at any time Eltra could—if it wished to, defer an order from Ford under this agreement in favor of some order other than one from Ford? In other words, could defer supplying the 30 million spark plugs to Ford in whole or in part in favor of supplying some other customer that might want that capacity at a particular time.

Now, does this provide any benefit to Eltra in terms of its ability to compete in the spark plug market? A. Currently we have capacity limitations, which would be relieved with the acquisition of the equipment under the Ford proposal and, furthermore, the flexibility that we would have in terms of the proposal of being able to defer, as it were, the obligation to Ford Motor Company to pursue an O.E. account of some substance, and this case could be Chrysler Corporation, it could be American Motors or Kaiser—and, as a matter of fact, we had a situation here, and the other

thing that could well come on quickly in terms of our position is the change, the indicated changes in the O.E. price of plugs from six to ten cents. This obviously takes up some of that difference between our cost to manufacture and what our competition is able to do, but we had some discussion with Chrysler Corporation because we had been [721] aggressively pursuing their MoPar Division activity in the area of spark plugs, we had also quoted at the time that they were going to introduce the Chrysler brand of spark plug for their dealer program. The concern at that time, as expressed to me by Mr. Hartig, Vice-president and Director of Purchasing for Chrysler, was the fact that if they had to change, we weren't able to take care of all of their volume at that point in time. In other words, we expressed lead time of X number of months to equip and so on to take care of it.

The Court: When was that?

A. That would have been within the last 12 months.

Q. (By Mr. Shapiro, continuing): What would be the total volume that they would be talking about for that particular segment of the business that you were interested in? A. Without going to the files, I'm thinking in the area of 30 million spark plugs as the general range.

Q. Well, would the Ford proposal enable you, then, to compete for that business of Chrysler on different bases from the one that you experienced within the last couple of years? A. Yes.

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[729] Q. Now, does that mass merchandiser also sell spark plugs over the counter to customers who purchase other than in connection with a tune-up or other servicing operations? A. Yes.

Q. Now, are some of those customers people who actually buy spark plugs to put on the car themselves? A. Yes. As indicated there by the Stanford Research Study, this has grown from a very modest percentage to the 28-30 per cent of all spark plug sales are to the do-it-yourself kind of customer, at least identified as a do-it-yourself customer.

Q. You mean between 28 and 30 per cent of the entire replacement market? A. Yes.

Q. Now, on some occasions are spark plugs sold over the counter by such a mass merchandiser to a local service station mechanic or owner who might wish to purchase a few spark plugs at a discount price? A. Retail dealers, this would include independent garage owners as well as service station operators, will buy spark plugs at a mass merchandiser.

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[773] Q. Then, Mr. Fiene, under the Ford proposal you would anticipate a volume in 1980 of approximately 68 million spark plugs, and a share of approximately 7.9 percent of the replacement market? A. You say as a result of the Ford proposal?

[774] Q. Under the Ford proposal. A. We would be equipped to move to that level and to maintain that position in the marketplace.

Q. Now, if the Government proposal were adopted, what would you anticipate would be the consequences to Prestolite Company? A. The Fostoria facility of Ford Motor Company has a rated capacity of about 175 million spark plugs which is up considerably from when it was an asset of the old Electric Autolite Company. It represents a very modern facility, a totally self-sufficient facility, a low-cost facility. The logical target or approach that they could get in the market because of earlier testimony that they would

have—there is a question about their O.E. involvement from a spark plug standpoint—they would then have to concern themselves with, in my opinion, the private label sector of the market.

Now, there are two current suppliers of those requirements; that is, two significant suppliers if I consider Eltra and Champion Spark Plug.

Champion again has tremendous volume base, very efficient, very competitive, a field force approximating 250 to 275 people. They cover the market like a blanket.

New Fostoria, in their efforts to gain [775] a foothold in the private label sector—and a little of this would depend on who the acquirer might be—for example, we take great pride and we merchandise to a considerable degree our systems concept. We supply everything electrical for your car, trucks that go down the highway have that written on the side of it. We are experts in starting, lighting, and ignition. Whoever acquires that plant could not duplicate that capability. They might well have strong automotive identity. My concern would be that in their efforts to get into private label, if that's the direction they must take—

The Court: Who?

A. The acquirer of the Fostoria facility under the Government proposal.

The Court: The New Fostoria?

A. New Fostoria, thank you.

This is the direction that they logically would have to take. They have got all of the competitive elements in terms of capacity, low cost. They would not necessarily have—they might have—the marketing know-how, the marketing team, the personnel to carry it out.

How would they get in? My best guess is that they would get in on the basis of price. We are very vulnerable to any shift in price in the private label segment or sector of the market.

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CROSS EXAMINATION

By Mr. McManus:

[783] Q. Mr. Fiene, does your company, Prestolite, make plugs for all makes of American automobiles? A. We make coverage—we are capable of making spark plugs application or spark plug models for all cars, but we generally cover better than 90 percent of the domestic [784] vehicles on the road. Now, some of this slops over into the import as well, because of common application, but by and large we make coverage for 90 percent of the vehicles on the road, and trucks as well.

Q. That would include the General Motors line? You would make applications for substantially all of the General Motors motor vehicles? A. Yes, sir.

The Court: What?

Mr. McManus: For the General Motors vehicles that he has—spark plugs his company makes would cover substantially all of the vehicles made by General Motors.

Q. (By Mr. McManus, continuing): Your answer is "Yes," is that correct? A. Yes, sir.

Q. This would be true for Ford? A. Yes, sir.

Q. And it would be true for Chrysler cars? A. Yes, sir.

Q. And it would be true for American Motors cars? A. Yes.

Q. So that you have an all-make line, is that right? A. Yes, sir.

Q. In your opinion is the quality of a plug that you make for [785] this all-make line as good as the original equipment plug? A. It is as good as the original equipment plug.

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[787] Q. (By Mr. McManus, continuing): Now, also, Mr. Fiene, you testified yesterday that Ford Motor Company was the Prestolite Division's second largest customer? A. That is correct.

Q. Could you give me an answer, and it may be confidential and maybe we can work it out, either a range of dollar sales to Ford or a range of the percentage of your total sales of Prestolite to Ford, could you give me an answer on either one of those? A. Yes. Chrysler is our number one customer; Ford is number two, and both of them would be in excess of 30 million dollars of sales.

[788] Q. Each one of them would be in excess of 30 million? A. Each of them would be in excess of 30 million dollars, yes.

Q. This would be annually. A. Yes, sir, based on our fiscal annual, which is the September 30th time period.

Q. All right. Now, under the Ford proposal, if they purchased 30 million spark plugs from Prestolite, what, in your opinion, would be the value of those sales? A. In terms of whether or not they would shift as far as being number one or number two, customer-wise?

Q. No. All I am trying to find out is: Under their proposal, they would buy 30 million spark plugs from your company; is that correct? A. That is correct.

Q. If that proposal went through, in dollars, what would that amount to? A. It would be between five and ten million dollars annually This is based on getting to this sustaining volume of 30 million units because we have a learning curve. This may not be achieved during the first year. The sustaining would be in that range.

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Testimony of Joseph T. Neill, General Operations Manager, General Parts Division, Ford Motor Company

DIRECT EXAMINATION

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[805] Q. Without, again, revealing the information, it would appear that certain substantial investments are anticipated in early years from this date forward, is that correct? A. That is correct. One of the principal reasons for that is the need very shortly for additional building space at Fostoria.

Q. How many people are employed at the Fostoria Plant, Mr. Neill? A. About 1,540 people.

Q. Now, if the Ford proposal were adopted and Ford were to purchase 30 million spark plugs a year from Eltra, would that result in any reduction of present Fostoria Plant employment? A. Under the Ford proposal, we do not anticipate any particular change in employment, because the Prestolite volume increase would be phased and would be offset by increases in volumes at Fostoria for spark plugs and other products.

Q. Are other products made at Fostoria? A. Yes, the positive crankcase ventilation valve for all Ford products is manufactured at Fostoria. They make water [806] temperature switches and automatic temperature control switches for our air conditioned cars.

Q. If the non-spark plug activities at the Fostoria Plant were to cease, how many jobs would be lost at Fostoria? A. Approximately 50.

The Court: You say if the spark plug—

Mr. Shapiro: If the non-spark plug manufacturing operations were withdrawn, your Honor, there would be the loss of 50 jobs.

Q. (By Mr. Shapiro, continuing): Now, if the spark plug manufacturing operation which is attributable to spark plugs that are exported from the United States were to be withdrawn from Fostoria, how many jobs would be lost? A. There are two pieces of export business. One is in excess of 20 million spark plugs, total plugs for export. This represents more than 200 jobs. We can say approximately 200. There are some 30 million insulator assemblies shipped to England. These represent another 200 jobs, so if we lost all the export business, slightly in excess of 400 jobs would be lost.

Q. Now, if there were divestiture of the Fostoria Plant under the Government's proposal, would Ford Motor Company source to the New Fostoria the spark plugs that are now manufactured there for export, or would Ford Motor Company source the spark plugs now manufactured at New Fostoria elsewhere? [807] A. I would expect that the export spark plugs would be sourced to Ford of Britain.

Q. Ford of Britain? A. Yes.

Q. Does Ford of Britain manufacture spark plugs now? A. Yes, sir.

Q. Would you explain why the spark plugs that are now manufactured at Fostoria for export would, in the event of divestiture, be soureed to Ford of Britain? A. I think there are two reasons. The manufacturing cost at our own facility would be lower than the purchase price from another supplier. I also believe that Ford would try to build up their own brand name in at least Europe; they could do this under a new brand name, under the Government proposal, with English spark plugs and begin to develop that name, at least overseas.

Q. Now, in the event, Mr. Neill, that one-third of the total production of the Fostoria Plant were to be lost to Fos-

toria, what would that mean in terms of job reduction? A. As I recall, that is about 400 jobs. I'm not exactly sure of that number, however, at the moment.

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[810] Q. (By Mr. Shapiro, continuing): Mr. Neill, avoiding, if you can, terms so technical that I can't understand them, would you generally describe the components and the interior of a spark plug, and state a little bit about how they work in terms of the spark plug function? A. Well, the spark plug is intended to provide a high voltage path through the cylinder head of the engine into the combustion chamber. The electrical path is through the spark plug wire terminal shown at the top, through the copper glass seal to the center electrode. The insulator insulates that high voltage path from surrounding grounded objects such as the cylinder head, and the shell provides a means for inserting the unit into the cylinder head. The arc of the spark plug, or the spark, occurs between the center electrode and ground electrode to ignite the mixture in the combustion chamber.

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[811] Q. (By Mr. Shapiro, continuing): Mr. Neill, could you explain the difference between the spark plug that you just described, which, as I understand it, is a standard spark plug, and the resistor spark plug which you now have before you? A. It can probably best be seen from the physical units that, in the standard spak plug, the copper glass seal has a—

The Court: Copper what?

A. The copper glass seal.

[812] The Court: Glass seal?

A. Right.

The Court: Copper glass seal?

A. Right.

The Court: I didn't understand that term when you mentioned it on Exhibit 58. Excuse me.

A. This is a copper color.

In the case of the resistor spark plug, that area is, for the most part, black. This resistor mix is intended primarily to reduce radio interference or communications interference emitted from the vehicle.

Q. (By Mr. Shapiro, continuing): Is there a difference in the insulator? A. No, not appreciably.

Q. Is there a difference in the shell? A. No.

Q. So the difference— A. The difference in the insulator is identification. It's marked resistor plug.

Q. I see.

The Court: You say it does not have the copper glass seal. I see a little—

A. Yes, sir, there's a small piece of it.

The Court: A small piece of it?

A. That's correct, at the base of the center terminal, but [813] the balance of the seal is provided by the resistor mix.

The Court: Just a second.

Now, will you explain again the purpose of this resistor mix, please?

A. Yes, sir. When the spark occurs, there is a generation of random frequencies that can interfere with communications; that is, radio, television and aircraft communications.

The industry has worked very diligently over the past 20 years or so to reduce these levels, and we now comply

to the level desired by the Federal Communications Commission. The resistor spark plug reduces these radiation emissions still further.

The resistor spark plug will be used on all Ford vehicles in 1971 across the board, so the conventional plug will be largely replaced in—in fact, and totally replaced by the resistor plug.

The Court: In other words, it is to reduce or eliminate interference?

A. Yes, sir.

The Court: Radio interference?

A. Yes, your Honor.

Q. (By Mr. Shapiro, continuing): Is the resistor plug any simpler to manufacture than the standard spark plug? A. Slightly more difficult because of the mixture of the resistor mix and the requirement to closely control its [814] processing.

The Court: Is that resistor mix a trade secret?

A. Yes, sir, it is.

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[838] (By Mr. Shapiro, continuing): In addition to that, you mentioned that there were current expenditures or quality control. Could you describe what those are and approximately what the cost is per year in terms of dollars and percentage of operating costs? A. The costs incurred in the daily operation of the plant, in the control of quality involve the Quality Control Department with their normal statistical quality control practices, the Plant Engineering Department who are responsible for the maintenance of tools and equipment, and the manufacturing [839] engineering department largely responsible for the control of the

process or the monitoring of the process and the institution of proper correction.

These costs at Fostoria amount to about four and a half million dollars a year or about 20 per cent of their total operation costs.

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[844] Q. (By Mr. Shapiro, continuing): Mr. Neill, are there any other types of activity related to quality control as we've been discussing it that are included in the four and a half million dollar figure that you testified about, or in the manufacturing column of FRC-63? A. Yes. And I would say they are more properly related to the product than to—in those cases, than to quality control per se.

The company maintains a large scientific laboratory and research center located at the Engineering Center in Dearborn. Their prime function is basic and applied research, and much of that work is done in the field of materials. They have contributed to the improvement of the spark plug from a design standpoint through their basic research in ceramics and in metals.

Also, there is the Manufacturing Development office of the company, who are responsible for the development of new manufacturing processes. They have contributed heavily to the process improvements that have been incorporated at Fostoria and our other plants. And they, for instance, were instrumental in the correction of the ground electrode welding problem that was apparent at the time of acquisition.

These costs are incurred as a central function of the company, and are not included in the division costs.

Q. Well, looking at the quality control costs at the moment that [845] are embodied in the four and a half million dollar a year figure, and in the manufacturing column in

FRC-63, if Ford Motor Company were purchasing spark plugs from a company that did not make expenditures substantially in amounts comparable to those amounts, what would be the consequences to Ford Motor Company? A. Well, the Ford Motor Company, including all its plants, is primarily concerned with the satisfaction of the car purchaser. Our objective is to build cars with a competitive advantage, and with high levels of reliability. We must also meet certain Federal requirements, particularly relating to emissions and vehicle safety, and we have an economic incentive to minimize our warranty and policy costs.

The warranty and policy costs that could be incurred from a defective spark plug are relatively insignificant as far as the spark plug is concerned, but they are of major significance with respect to engine warranty and policy.

Q. Engine what?

The Court: Warranty.

A. Engine warranty and policy.

Pre-ignition defects, for example, can cause damage to engines that result in repair costs of many hundreds of dollars. This sort of makes the spark plug a needle in a haystack proposition.

[846] If Ford were to purchase spark plugs from a company who did not maintain high quality standards, it would have a seriously adverse effect on our competitive position with automobiles, and have a fairly serious economic effect, potentially, in the warranty and policy area.

Q. (By Mr. Shapiro, continuing): Would it also have an effect on Ford Motor Company insofar as it would be a distributor of spark plugs too—at least to its dealers? A. I'm not sure I understand the question.

Q. Well, as a spark plug seller to its dealers, would—you've talked about what would happen if defective spark

plugs were put in the automobile as it's manufactured; is that correct? A. That's correct.

Q. And now I am saying, would it also have any consequential injury in Ford's relationship with its dealers, if it were to be selling its dealers— A. Potentially, yes, the dealers are unhappy if our products don't satisfy their customers. It very probably would encourage dealers to quit using our spark plugs.

Q. Now, Mr. Neill, back in May, 1961, did Ford Motor Company put those defective spark plugs in Ford automobiles? A. No, sir. To the best of my recollection no Autolite spark plugs were used until September or October of '61, and spot buys, so to speak, of Champion spark plugs, were made [847] during that three- or four-month interval until the problems with the acquisition-type plug were cleaned up.

Q. Mr. Neill, does Ford Motor Company sometimes source a component inside Ford Motor Company and nowhere else? A. Yes.

Q. Does it sometimes source parts to a single supplier? A. Yes.

Q. Does it sometimes source parts inside Ford and outside to multiple suppliers? A. Occasionally, yes.

Q. Now, what are the considerations involved as to whether Ford Motor Company will source inside only, or possibly single source to an outside supplier? A. I'm not sure that there's a formal or official company policy, but based on my experience there is a distinct trend or tendency for the more sophisticated products, technology-wise, or the more critical products to the ultimate performance of the car, to be sourced, single sourced inside the company. There are exceptions, obviously. Tires, for instance, a critical, and they are completely out-sourced to multiple sources.

Within our division, parts that are virtually a hundred per cent sourced or are a hundred per cent sourced that are critical in nature, include instruments, alternators, carburetors with one exception, heaters and air conditioning [848] systems, speedometers, spark plugs, distributors, ignition cables, virtually the entire ignition system is insourced within Ford except for the spark plug wires.

The multiple out-sourced parts are generally non-critical; decorative hardware, trim pieces, that sort of thing.

Q. Now, in the manufacture of spark plugs, Mr. Neill, are there occasions where, after the initial engineering release of the spark plug, changes are made as the result of things that the company learns about the particular model of spark plug? A. Yes. One case—well, there are a couple of cases—one associated with Job 170, that is of some significance. We encountered, in our engine plants, very early in the model year, insulator breakage to a very minor degree on the AF-42 spark plug used in our 351-cubic inch Cleveland engine. This was reported probably in May, May or June of 1969. Product change requests were incorporated into the product by September, which increased the strength of that insulator about 30 per cent over its original strength, and about 15 per cent over competitive plugs of that size.

The close cooperation of the product design engineers, the Fostoria Plant and the engine plants and their engineers, is quite critical to the quick reaction and [849] sense of urgency in correcting problems. These cracked insulators, if they had continued, could have resulted in significant warranty and policy in the engine.

Q. You mean claims under warranty and policy obligation of the company? A. That is correct.

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[856] Q. Now, is there an activity of cooperation between those two [857] groups of engineers at Ford Motor Company? A. The engineers who are responsible for the engine and the engineers who are responsible for the spark plugs and the other engine electrical components are housed in the same building at Dearborn. These engineers work very closely together in the design, development and test of the engine system, so they are housed in the same building and they communicate regularly, frequently.

> The Court: You mean the engineers who are responsible for the engine design and those responsible for the spark plug?

A. Yes, sir, and other engine electrical components. They are housed in the same building. Specifically, it is referred to as the Triple E Building at Dearborn, the Engine and Electrical Engineering Building.

Q. (By Mr. Shapiro, continuing): Do you consider the relationship among these engineers to be of importance to Ford Motor Company? A. Yes, sir, I do.

Q. Would you explain in what way? A. In the development of new engine systems, the engine engineers hold back no information from members of their own company. In turn, our engineers hold back nothing from our own plant, because we are all the same family. Some of the advanced work being done involves what are hoped to be radical improve- [858] ments in combustion chamber design. Work is going on on turbine engines or turbine modes of power. Advanced work of this sort is, in my opinion, significantly discouraged in effectiveness and in communication between the relative groups when more than one company is involved.

Joseph T. Neill—Direct Examination

Q. Is the importance of the relationship changing in importance now and into the future or is it remaining the same, as it has always been? A. Well, technology is moving at an increasingly rapid rate and I believe that this communication is becoming of increasing importance.

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[906] Q. (By Mr. Shapiro, continuing): Now, Mr. Neill, from the standpoint of the automobile manufacturer, has the impact of these emission control problems had any effect upon the desirability or need for close cooperation between spark plug and engine and foundry engineers? A. The increase in emission requirements, or the increasing [907] restriction of emission requirements, has increased the need for cooperation between the respective engineers.

The engine system changes more frequently and with more urgency today, in ways that can effect the spark plug, and often do.

The compression ratio changes, distributor timing changes, that are found necessary to cause the vehicle to meet emission requirements, generate a greater need for closer cooperation between these engineers.

The Court: Well, what was that again, please, the last statement you made, engine changes?

A. Well, in controlling emissions the engine engineers change combustion chamber design, compression ratios, distributor timing, valve timing, to try to find the—

The Court: Are you talking, now, in the sense of to meet these emission control requirements?

A. Yes, your Honor.

The Court: You say this requires close coordination of the efforts of the engine engineers and the spark plug engineers, or something like that?

A. Yes, sir. It certainly enhances the need for that kind of work.

The Court: All right.

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[908] Q. (By Mr. Shapiro, continuing): In your opinion, Mr. Neill, from the standpoint of the installing mechanic, will the advent of emission controlled testing have any effect with respect to his selection of spark plugs for a tune-up operation?

Mr. McManus: I am objecting to it on that broad a statement. I don't know how the—

Well, I will withdraw my objection, I think, your Honor.

The Court: All right.

Mr. McManus: Go ahead. Let him answer it.

The Court: All right.

A. The advent of vehicle emission control, particularly State inspection and perhaps ultimately Federal inspection, it seems to me would reinforce the mechanic's preference for the O.E. brand plug.

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[913] Q. Mr. Neill, would you explain the difference between an original equipment spark plug and a non-original equipment spark plug? A. The original equipment spark plug is born, so to speak, with the engine. It goes through extensive laboratory dynamometer vehicle testing as the engine is developed. New engine systems are also tested

in fleet service in the field before they are introduced to the general public.

In a substitute spark plug, the—in almost all cases the work is done exclusively in the laboratory and on rating engines which determine the heat range of the spark plug. So, they are—the equivalent plug does not see the same test path that an O.E. plug sees.

Q. Would you explain in a little more detail what you mean by "test path"? A. Well, as I explained previously, the O.E. plug is tested with the engine that it's married to, so to speak, throughout the total engine development program.

Q. Now, what, if any, advantages accrued to a retail installing mechanic from the installation of an original equipment replacement spark plug as distinguished from a non-original equipment spark plug? [914] A. His certainty, so to speak, is better with the O.E. spark plug. It's the same component that the manufacturer originally put in the engine.

The engine is a pretty high-cost investment and the cost of plugs comparatively are quite low, so this certainty with the original equipment plug is—

The Court: Certainty of what?

A. Of success of no kick-back, so to speak, from the customer.

I would comment that of the Big 3, that is to say, A.C., Champion, Autolite, the substitutions are quite good and I think that the mechanics' preference for the O.E. plug is a concern that a customer may kick back on an engine problem whether it had to do with the plug or not where he's not vulnerable to that if he installs the O.E. plug.

Q. (By Mr. Shapiro, continuing): Well, what about the situation where it's not one of the Big 3, to to speak, that

the mechanic installs? A. In my opinion, he gets into an area of substantial risk in that case.

Q. What is the risk that he gets into? A. As the plug producer's volume drops and his market penetration drops, there is a distinct tendency to substitute a single plug, a single heat range plug for a broad range [915] of O.E. plugs or broader range of O.E. plugs.

The Court: What is that again, please?

A. As the aftermarket manufacturer has lower volume and lower market penetration, he tends to select a single spark plug and substitute it, for instance, for four A.C. spark plugs, four different kinds. He will recommend a single substitute.

The Court: Who would?

A. The small manufacturer.

[916] The Court: Well, when you use the expression of the Big 3, what are you referring to there?

A. AC, Champion, Autolite.

Q. (By Mr. Shapiro, continuing): Do you see any other advantages accruing to the installing mechanic or retailer from the use of original equipment replacement spark plugs? A. There is a matter of convenience, and I'm not sure how significant it is. But when he removes the O.E. plug from the engine, the number is there, the plug designation. If he chooses to replace with another make, unless he's very, very familiar with spark plugs, he has to go to conversion charts or equivalent charts and look up the other manufacturer's equivalent, which takes a small increment of time and perhaps there is some risk of error in that translation.

Q. That risk, of course, doesn't exist if he replaces with the original equipment spark plug? A. Not unless, you know, a prior installer had made a mistake.

Q. In which case he would have to go back to the catalog, is that correct? A. Well, if he made a practice of replacing the same plug he probably would never go back to a catalog.

Q. Well, would he be taking a risk if he simply used the same plug, if it were not an original equipment brand? A. I would say—

[917] The Court: Wait a minute now. What is the question?

Mr. Shapiro: Well, I say, for example if a mechanic saw a spark plug in an automobile and he replaced it without checking the catalog and it were not an original equipment brand; would he be taking a risk?

A. If the plugs that he removed were in reasonably good condition, I'd say that there was no risk associated with that action.

The Court: Even if the plug was not an O.E. plug?

A. Yes, sir.

Q. (By Mr. Shapiro, continuing): If the plugs were not in reasonably good condition, then he would be alerted to —A. To a problem in that engine.

Q. Now, are there any factors, in connection with emission control or safety or that sort of thing, that would enter into the mechanic's choice? A. Well, I think we talked—mentioned yesterday there is evidence that state inspection may be in the offing, and that would probably reinforce his feeling for the O.E. plug.

In the event of an engine malfunction, for whatever reason, particularly loss of power as a result of misfiring, vehicle passing distances and things of that sort increase, so there might be a safety concern.

Q. Mr. Neill, what do you regard as the consequences to Ford [918] Motor Company that would result from the Government proposal, that would require Ford to purchase spark plugs from a new Fostoria in accordance with the schedule in the Government proposal? A. Perhaps most significant in my view is the lack of a freedom of choice on the part of the Ford Motor Company, and the loss of leverage or power, so to speak, to continue the manufacture of the plugs, either directly or indirectly, as a result of that proposal.

Another factor is the loss of cooperation—or not necessarily cooperation, but a loss in degree of understanding on the part of the manufacturer. As we explained yesterday, the plants, the engineers, are all tied very closely together today. That separation, in my opinion, could not help the situation.

It's also more difficult to impart a sense of urgency, if you will, to the correction of problems to an outside supplier, no matter how reliable or how good he is. You know, an internal source can react more quickly and they are motivated differently.

Now, these, I think, are the principal factors that I would be concerned about.

Q. Well, what degree of consequences to Ford Motor Company would be the absence of the leverage and the control that you're been talking about? [919] A. Well, that the question of quality arises. Quality can't be inspected, and the basic process has to be reliable. And it would be —it would probably be pretty far out of bed, quality-wise, before we could really recognize that we were in serious

trouble. That is to say, by the time warranty feedback came, we could have a lot of bad material in the field.

Another factor is the vulnerability to gouging, if you will, particularly when changes are made. If a change is needed badly or is absolutely required, and you have no negotiating power or room, if you are handcuffed to a supplier, he can charge you just about anything he wants to incorporate a change.

Q. What sort of charges are you talking about? A. Tooling, primarily.

Q. Now, if a supplier to whom Ford was locked by a court decree were to experience financial difficulty, what consequences would you anticipate, Mr. Neill, under the Government's decree, to Ford Motor Company? A. Well, I think that I'd have to answer that a number of ways. I don't think there is a single answer.

I think it would depend on the objectives and the integrity, so to speak, of the firm. If they were in financial difficulty as a result of the spark plug operations, it seems to me they would have a choice of either going [920] out of business or beginning to reduce costs within the plant that might adversely affect quality.

A third thing they might do is reduce their engineering or research and development costs and not worry about the long-run. Just, you know, take care of today and forget tomorrow.

But I say those would be three things that they could do.

Q. In your opinion and from what you know, were these things that you are now saying a new Fostoria might do, of the same type as the things that the old Fostoria was doing before the acquisition? A. I think there's a definite relationship. As an example, in the technical and professional employment area at the Fostoria plant, at the time of the acquisition there were 30 personnel. Today there

are 64. Now, these are technical people, in our terminology, "Salary Grade 7," and above. They do not include foremen in this kind of thing.

Q. If Ford Motor Company were to source outside the new Fostoria under the Government's proposal, what alternative sources could Ford Motor Company go to for Brand X spark plugs? A. I think there are only two real alternatives; Champion and AC.

Q. Why do you say only two real alternatives? A. Well, quality, primarily, and capacity, secondarily.

[921] Q. Well, under the Ford proposal, if Ford were sourcing to Eltra 30 million spark plugs, what would be within Ford's control as to the quality of the spark plugs that it would be purchasing from Eltra? A. I think there are two factors that are worthy of consideration in that area. One is that Ford would continue to do the engineering on the spark plugs that it does today. This would mean that the Eltra Company, at least on Ford engines, would get a free ride, so to speak.

The other factor would be the ability to shut off Eltra on an interim basis and use alternative supply from our own Fostoria Plant if they fell out of bed quality-wise.

Q. If the New Fostoria fell out of bed quality-wise, what could Ford do under the government proposal? A. I guess it would boil down to a choice of either quit building vehicles or ship vehicles with defective quality or somehow exercise enough power over the New Fostoria to get it straightened out, and when you're handcuffed to a supplier, that's pretty difficult to do.

Q. Well, would Ford Motor Company have any power over the New Fostoria under the Government decree? A. In my judgment, very little.

Q. From a manufacturing and engineering point of view, could Ford Motor Company re-enter spark plug manufac-

turing at [922] the end of the ten-year period under the Government's proposal? A. Yes, I believe so.

Q. From an engineering and manufacturing point of view, would it be desirable for Ford Motor Company to do so? A. Yes.

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CROSS EXAMINATION

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[979] Q. Mr. Neill, could you describe for me again your position with the Ford organization? A. General Operations Manager, General Parts Division.

Q. And who would you report to? A. I report to Mr. Jack McDougall, the General Manager of the General Parts Division.

Q. Who would he in turn report to? A. Mr. York, who is a Vice President.

Q. And you and your immediate superior are not officers in Ford Motor Company? A. That is correct.

Q. And then who does Mr. McDougall report to? A. Mr. York.

[980] Q. Oh, excuse me.

And who does Mr. York report to? A. Mr. Innes.

The Court: Mr. Who?

A. Mr. Innes, I-n-n-e-s.

Q. (By Mr. McManus, continuing): What's his position? A. He's a Group Vice President with the Ford Motor Company.

Q. And then who does the Group Vice President report to? A. Mr. Iacocca, who is the—I guess he's the President of North American Operations.

Q. And then who does Mr. Iacocca report to? A. Mr. Ford.

Q. I see.

The Court: Three presidents now to today?

A. Yes, sir.

Q. (By Mr. McManus, continuing): Now, when you stated this morning that Ford Motor Company has no intention to construct any additional battery plants— A. That is correct, sir.

Q. And that is your opinion, is that correct? A. That is correct.

Q. And to get a battery plant approved, it would have to go through this whole chain of command, at least, that you described today? A. Yes, plus the Board of Directors.

[981] Q. Plus the Board of Directors? A. Yes, sir.

Q. So that statement was merely your opinion? A. That is correct.

Q. Now when you said that Ford—and correct me if I don't quote you properly, please, I have notes here.

I think you said, "could and would re-enter the manufacture of plugs at the end of ten years"? A. Yes, sir.

Q. Is that a correct statement? A. That's correct.

The Court: What was that question again?

Mr. McManus: He said this morning that Ford Motor Company could and would enter the manufacture of spark plugs at the end of ten years.

Q. (By Mr. McManus, continuing): That is also your opinion? A. Yes, sir, that is correct.

Q. And before any approval, it would have to go through the complete chain of command that you outlined? A. Yes.

Q. Plus the Board of Directors? A. Yes, sir.

Q. Now, as I understand it, you said that Ford could and would enter the manufacture—did you use the word sale [982] also? A. I'm not sure. I believe I did.

Mr. Shapiro: Excuse me. I really do think, your Honor, that Mr. McManus is not characterizing the witness' testimony exactly correctly.

The Court: Well, he has told the witness to correct him if he is.

Mr. McManus: That's right.

Mr. Shapiro: Well, I thought he said he would consider it desirable.

A. Yes, it was my opinion.

Q. (By Mr. McManus, continuing): I understand. But did you limit it to manufacture or did you include sales? A. My orientation is toward manufacturing and toward the vehicle itself and Im sure that if we were in the plug business we would go after the aftermarket.

Q. So that— A. So I think it would be fair to say that we would sell plugs.

Q. As you said, the—your orientation, you are basically an engineer, isn't that correct? A. That is correct.

Q. And so, therefore, you are—you feel you are qualified to say that Ford has the capability to manufacture spark plugs, isn't that correct? A. Yes, sir.

* * * * *

[985] Q. Now, you also testified, I believe, that the Big 3 manufacturers of spark plugs have satisfactory substitutes— A. Yes, sir.

Q. —for each other's plugs. A. Essentially good substitutes for each other's plugs.

Q. And that they—well, let me strike that.

You do not consider Prestolite having a satisfactory substitute for the Big 3 plugs? A. No, sir, I do not.

Q. Why is that? A. Because of the range of O.E. plugs they try to cover with a limited number of spark plugs. This goes to the substitution thing I referred to wherein a

single plug may be recommended for use in as many as four or five other applications, other plug heat ranges and types.

Q. I see. So their range is limited.

Under the Ford proposal do you consider Prestolite as an adequate supplier of spark plugs to the Ford Motor Company? A. I believe, with the engineering provided by Ford and with the [986] alternative of shutting them off on an interim basis if they fell out of bed quality-wise, they would be an adequate supplier.

Q. So as I understand it, the proposal, they would buy a certain number of plugs over a period of 15 years; is that correct? A. I am not sure. I'm sorry. My understanding —the limit of my understanding is through the first few years. The 30 million may be 15 years, or ten. I'm sorry, I just don't know.

The Court: Well, you said in your opinion Prestolite could be an adequate supplier for Ford. Under what circumstances?

A. We provide the design engineering and have the capability of supplying our own plugs in the event they got out of bed, so to speak, quality-wise. In other words, we could shut them off for two months or a month if we had to.

Q. (By Mr. McManus, continuing): Do you foresee quality problems with Prestolite? A. I haven't reviewed Prestolite plugs in the last eight or nine years. If their quality is similar to that re-acquisition, my answer would be yes; their current quality level, I don't know.

Q. Now, you talked today and indicated that when a mechanic has an Autolite plug, and if he wants to put in an AC plug, for example, he has a conversion table. A. Yes, sir.

[987] Q. And you indicated that this might lead to some mistake in making the conversion, is that correct? A. It might. It's a matter of reading across a line. I would consider the chances for error to be very remote, but that chance exists.

Q. You consider it very remote? A. Yes, sir.

The Court: Well, what are these conversion tables?

A. They are—

The Court: Do they specify—

A. Yes, sir, they will—

The Court: —brand or—

A. Usually they're a table that shows, by each manufacturer—for instance our table would show that we consider our Plug X to be equivalent to Champion's Plug Y.

The Court: And AC Plug Z?

A. Z, yes, sir.

Q. (By Mr. McManus, continuing): Now, before the acquisition of Autolite Champion had been a supplier to your company for approximately 50 years, is that correct? A. Yes, sir.

Q. Did your company work closely with Champion in designing plugs for your automobiles? A. We did not design spark plugs per se when Champion was our [988] supplier. Champion provided the detailed design for the spark plugs, which we utimately used. Our relationship with Champion was one of the exchange of information; they would provide sample spark plugs, we would try them in our engines, measure temperatures, measure firing voltages, assure the

durability of the plug, and in a cut and try process, get a plug that performed well in our engine.

[989] Q. I see.

The Court: How would you do it, on an empirical basis?

A. Well, it's largely a test basis. If you consider that empirical, yes. Dynamometer tests—

The Court: Trial and error?

A. Yes, to a degree, that is right.

Q. (By Mr. McManus, continuing): But assuming you were designing changes in your engine, wouldn't you bring up Champion people to work with you in designing the plugs for that engine? A. I can be very specific on that one. I was working as a project engineer on ignition when our overhead valve V-8 engines were first being developed. An engine starts in the design concept stage usually at least three or four years before that engine is introduced.

We had, frankly, a difficult time concealing the fact from Champion that we were about to produce an ovehead valve V-8 engine. We did not show Champion any engine designs. We did not let them come into our dynamometers while that engine was under development.

Q. Now, I think you testified that you feel that it is important that the Ford Motor Company has this close tie among engineers, the engine designer and the spark plug manu-

[990] facturer. A. Yes, sir. I think it is highly desirable.

Q. All right, highly desirable, and did you indicate that you thought it was highly desirable to enable you to compete with General Motors?

The Court: To do what?

Mr. McManus: To compete with General Motors.

A. I did not indicate that, but I think the firm with that close tie has an advantage, so, you know, I would agree it may put us at a competitive disadvantage, particularly with respect to reaction time compared with General Motors.

Q. (By Mr. McManus, continuing): So that if this arrangement that you presently have, where you have your own engineers for Autolite and the Ford engineers live and work together works out, you will have a competitive advantage over the Chrysler Motor Corporation; is that correct? A. Yes, sir.

Q. Now, in your opinion, in order for Chrysler to become competitive, they would have to purchase Champion; would that be correct? A. I think they would be in a better position, again particularly with respect to reaction time, if they were a manufacturer.

Q. That would be the logical step for them, wouldn't it? A. I don't know their financial situation.

[991] Q. No, no. I am not talking about finances. I am just talking about—you indicate that if you don't have these engineers together, you have difficulty competing with General Motors. A. Well, yes, I do.

Q. And wouldn't the same thing be true, that Champion would have difficulty—I mean, excuse me, that Chrysler would have difficulty competing with you? A. Well, the degree of competition—and I don't mean to exaggerate this point; I am not saying that our competitive disadvantage with General Motors is any mountain or any huge thing.

Q. I see. A. This reaction time, the ability to react to problems and to needs of a new engine family is significant.

Now, whether the customer can ever perceive it, I don't know, and, really, when you talk about competition, we are talking about the customer's perception.

The Court: Why would Ford, in the present setup, be at a disadvantage to compete with A.C.?

A. We are not at a disadvantage for A.C.

The Court: Oh, I thought you said you would be.

A. Under the Government's proposal, I believe we would be.

The Court: Oh, under the Government [992] proposal. Oh, I see.

Q. (By Mr. McManus, continuing): You feel, then, that if these engineers, as you were talking about, were not both of the same family, the Ford family, that you would be at a competitive disadvantage to General Motors; isn't that correct? A. That is correct.

Q. Now, you would, as I understand it, also agree that if this is allowed to stand and you have the same engineers in the family, that Chrysler would be at a competitive disadvantage to you; isn't that logical? A. It is logical. I don't know the innards of the Chrysler Corporation, though. I am not sure what Chrysler's relationship with Champion is. If Chrysler has a high degree of confidence that Champion will maintain information in confidence, their relationship may be as good as ours.

Q. So that if Ford Motor Company and the Autolite were separated and you could set up the same confidential arrangements, it wouldn't make any difference then; is that correct? A. That is correct.

We didn't have that degree of confidence with Champion.

Q. I see, but if you set up this degree of confidence—

A. Yes, sir. Hypothetically, that is correct.

[993] Q. This need of having the engineers live together in the same building and go to lunch together and have a

beer together and so forth, it is really not significant; is that correct? A. I would agree.

* * * * *

[997] Q. (By Mr. McManus, continuing): Now I think that you testified here recently that all of the major manufacturers of spark plugs have adequate substitutes, one for the other, is that correct? A. Yes, sir. In most cases—in fact, in all cases as far as I know, when the—when Champion or AC or Autolite do not have a good substitute, they don't offer a substitute.

Q. I see. A. The conversion chart will be blank for, you know, ACX. If [998] Champion doesn't have a good substitute, they don't show one.

Q. Now, do you know if the Ford Motor Company has any plans in the future to advertise the consumer, the warehouse distributor and the jobber that one plug is as good as the other? A. No, I do not.

Q. Now on the conversion table that you were talking about, mechanics' conversion table, do you know what plugs are on that table? A. No, sir.

By make?

Q. By make, yes. I mean, in other words— A. I think—

Q. —do you know what— A. Almost always Prestolite is included along with AC, Champion and Autolite.

Q. Thank you. A. At least some of the ones I've seen include Prestolite.

Q. Do you know who makes up these conversion charts? A. I believe each manufacturer makes up their own.

Q. I see. So, Ford-Autolite would make one up? A. Yes, sir. Champion the next one.

Q. And maybe AC? A. And AC, each one.

[999] Q. Now, you testified yesterday that Fostoria facilities presently have approximately 1540 employees, is that correct? A. That is correct, sir.

Q. And that 50 of them are in the non-plug production end of the business? A. That is correct.

Q. And at the time of the acquisition of the Fostoria facilities, were these people working at the Fostoria plant? A. On the non-plug product?

Q. Yes. A. No, sir. The products were not in that plant.

Q. So these people came from one of your other plants? A. No, sir. These were new products that were brought in to the Fostoria Plant because of their skills and capabilities.

Q. I see. So that— A. These products have not previously been manufactured.

Q. By Ford? A. By anyone.

Q. By anyone? A. That's correct.

Q. So these were new products that you brought in to the Fostoria Plant? A. That is correct.

Q. And I guess you hired people who work there on them now? A. Yes, sir.

[1000] Q. Now you indicated also that 230 people are employed in export plugs and insulators, is that correct? A. That is correct.

I would like to double check. I got fouled up on that one once before.

Yes, sir, that's correct.

Q. Now you testified that in the event the Government's proposal went through, that it was your belief that these plugs would be made abroad? A. Yes, sir.

Q. By a Ford facility? A. Yes, sir.

* * * * *

[1003] Q. Now, if the New Fostoria Plant could provide them to—after the—if the Government's plan was put into effect, and the New Fostoria Plant was split off, if they could provide them to Ford of Britain cheaper than Ford

of Britain could make them, wouldn't it be to your advantage to continue to buy from the New Fostoria? A. Assuming proper quality, yes, sir.

Q. Proper quality and if competitive price, you would consider the New Fostoria as a source of supply? A. At a price lower than Ford of Britain could make them.

Q. Yes. A. Yes, sir.

Q. I understand. A. Yes, sir.

* * * * *

[1010] Q. Now, you had discussed in considerable detail quality control on spark plugs. A. Yes, sir.

Q. Now, isn't this a problem with other products that you purchase? A. Yes, sir.

Q. As I understand it, some of these products that go into the Ford vehicles are purchased outside the Ford Motor Company. A. That is correct.

Q. I assume that you have set up stringent standards that these people have to meet who are selling to the Ford Motor Company; is that correct? A. They certainly understand what our standards are, yes, sir.

Q. So that in purchasing any product for your vehicles, the supplier has to furnish you with a product which satisfies the Ford Motor Company standards; is that correct? A. Essentially correct, yes, sir.

Q. What would you say was not correct? A. Well, occasionally we have found ourselves in difficulty with a supplier's product and have had to shut them off, so to speak.

Q. Well, in other words, if they are not giving you a good product, you would discontinue them as a supplier; is that correct? A. That is correct. Not necessarily forever, but on an interim [1011] basis. This happened in the 1970 model year with tires.

Q. So insofar as getting a quality product for your vehicle, you would have the same problem if you were buying tires as you would if you were buying spark plugs. A. That is true.

Q. And any other product that you might buy? A. Yes, sir, that is true.

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Q. (By Mr. McManus, continuing): Now, I think you also testified, Mr. Neill, that the trend is for Ford to single-source inside the company the sophisticated or critical products to a vehicle, an automobile; is that correct? A. That certainly seems to be the case within our Division, and I think it is probably Company-wide.

Q. At least within your Division, it is true. A. Yes, sir.

[1012] Q. Now, after the expiration of Ford's proposal in this case, which is to buy the 30 million plugs a year, with a total of approximately 300 million, would you believe that the Ford Motor Company would continue to buy plugs from the Prestolite Company? A. That is a very difficult question to answer, but I would suspect that if their performance had been good, their quality good, Ford would continue to buy the plugs from Prestolite.

Q. Then this would be counter to the trend that you see in your Division? A. Well, the 30 million plugs would be a relatively small portion of the total business. Certainly by that time—the future that far out is so uncertain, you know, it's hard to speculate, but I would see no reason to cut off a reliable outside parts supplier, on a small increment of total supply after 15 years of good performance.

Q. Of course, this would be a small increment of your total supply; is that correct? A. By 1985, yes, sir.

Q. And you would assume that that would stay a small increment, that it wouldn't exceed the 30 million; is that

correct? A. Well, hypothetically, if we suddenly started using turbines ten years from now, the capacity numbers we talk about now would all wash away.

[1013] Q. But percentage-wise, after the period of the proposal, you would believe that the percentage share that you might buy from an otuside source such as Prestolite would be very— A. Relatively small.

Q. Can you see the Ford Motor Company, if they are allowed to retain the Autolite facilities, ever buying a substantial number of spark plugs from an outside source? A. No, sir.

The Court: Do you think Ford would buy any spark plugs from an outside source after the ten-year period, under the Ford plan? What would be the reason for them to buy any spark plugs from an outside source?

A. Well, in the earlier question, as I understand the question, it was if we outsource 30 million plugs under the Ford proposal, would we, at the expiration of that period, continue to buy them.

The Court: That is right.

A. And my answer was that assuming Prestolite or Eltra or whoever was involved had provided us high-quality, reliable plugs for 15 years and the 30 million representing a relatively small part of our total supply, that I would not expect Ford to cut them off.

The last question, I believe, was, if we were allowed to retain our facilities—

Maybe you should restate the question.

[1014] Q. (By Mr. McManus, continuing): Yes. As I understand it, if you are allowed to retain the Autolite

manufacturing facilities, I think that you testified that Ford would never purchase a significant number of spark plugs from outside; isn't that correct? A. Not within the foreseeable future; yes, sir, that is right.

[1015] Q. Now, you indicated that you might continue this purchase of 30 million plugs from Prestolite. Would you consider, if the New Fostoria was divested and they did an excellent job for you, that you might consider them as your primary source of supply? A. I think our principal concern with the Government proposal is that it appears —it seems to us that Fostoria is going to be under substantial financial pressure. This backs us into concern about quality and the inability to do anything about it.

Now, if New Fostoria were a partial supplier, were threatened with competition or with our re-entry and were a good supplier, I would say we would continue to buy from them.

Q. So that in part, one of your concerns is the company that might take over the New Fostoria, is that correct? A. Yes, sir. Their objectives, their ability to run such an operation and to know whether or not they're willing to subsidize such an operation.

Q. So that many of your fears, if the company was a well-financed company, well-run and knowledgeable in the after-market, many of the fears that you have stated here today would be substantially minimized, is that correct? A. That is correct.

If Mr. Page's projections are correct, [1016] though, it's unlikely that such a company would be interesting.

Q. But we never know, do we? A. No. That is correct.

Q. Until the plant is available for sale. A. That is correct.

Mr. McManus: That's all I have, your Honor.

The Court: All right, any redirect examination?

Mr. Shapiro: I have a few more questions, your Honor.

The Court: All right.

REDIRECT EXAMINATION

By Mr. Shapiro:

Q. Mr. Neill, Mr. McManus asked you some questions about the battery—what kind of decisions that would have to be made in order for a battery facility to be planned. A. To be built or to be approved?

Q. Or to be built. A. Yes.

Q. Do you have jurisdiction over the Owosso Plant now? A. Yes, sir.

Q. Do you have jurisdiction over the Shreveport Plant? A. Yes, sir.

[1017] Q. If there were another plant built, would it fall under your direction? A. Very probably, yes.

Q. If there were any plan to construct any new battery facility, would you know about it? A. I certainly would think so, yes.

Q. Now, Mr. McManus was just a minute ago asking you questions about the New Fostoria and what it might or might not be able to do, and you have used the word "subsidized." You would depend upon whether a company would be willing to subsidize the operation. Would you explain more fully what you mean by that? A. Well, from the exhibits we introduced this morning [FR-73; FR-73A], we demonstrate our view that the company would be in substantial difficulty. At that point, it seems to me, a corporation, let's say, that owns that plant has a choice of either cutting costs, which backs us into the quality question, or pumping additional corporate funds into the facility to support it; this is what I meant by subsidy to continue

a good operation and, you know, on a losing money situation.

Q. Now, you also testified in answer to Mr. McManus' questions that there would be a question of whether you had an alternative or whether you could re-enter as to the kind of supplier and customer relationship you could have with [1018] the New Fostoria; do you recall that? A. That's correct. Essentially, yes.

Q. Well, now, would the quality of the spark plugs that would be likely to be supplied by the New Fostoria in the circumstances that you envision be affected by the question of whether you did have alternatives? A. Very probably. I would think that, for instance, if Ford had a choice of two or three suppliers for spark plugs, the incentive to produce quality plugs would be much greater than if the supplier knows you have no alternative.

Q. And would this be particularly true if the supplier were undergoing certain problems in the marketplace? A. Yes, sir.

Q. Mr. Neill, you have testified about certain conditions that existed at Fostoria, in the Fostoria Plant in around 1961 when the acquisition took place; do you recall that? A. Yes, sir.

Q. Now, assuming that the New Fostoria would start out with the Ford Motor Company level of quality, how long do you think it might take, in your best judgment, for quality to deteriorate under your projections to a point comparable to the situation that existed in 1961? A. Well, that's highly speculative, but it would appear that by the third year they would recognize they're in pretty serious trouble.

[1019] Mr. Shapiro: I have no further questions.

Joseph T. Neill——Recross Examination

Mr. McManus: Your Honor, I just have—I think I just have two.

The Court: All right.

RECROSS EXAMINATION

By Mr. McManus:

Q. Now, I just wanted to make it abundantly clear that on Exhibit FRC-73 that was offered this morning and we had our hassle about, that there is no provision in there for a new company to obtain new business. A. That is correct, sir.

Well, let me—certainly there is no alternate distribution shown, yes, sir.

Q. Yes, sir. In other words, you're just taking your—in the aftermarket, you are taking the Autolite customers that you estimate that they would have at the beginning of the period, and then you gradually whittle that down as you believe they would lose business? A. Yes, sir. Yes, sir.

Q. And there is no provision in there for an aggressive company getting in and maybe picking up a great deal of additional business, is there? A. That is correct.

Q. And if a new company was able to do this, this FRC-73 would be changed substantially, is that correct? [1020] A. It would be changed, yes, sir.

Q. Now, wouldn't the New Fostoria, if you got a dynamic, aggressive company buying the New Fostoria Plant, wouldn't they have as much incentive as anybody to sell you good plugs and to retain your business? A. They certainly would have that incentive. The prospect, however, of Ford re-entering and trying to develop their own new brand would lead me to question the objectives of a buyer. It would seem to me his long-run outlook would be a pretty

dim one because of the prospective re-entry of Ford, the obviousness of the O.E. association and—

Q. Now—excuse me. I didn't want to interrupt you.

Mr. Shapiro: Yes.

Q. (By Mr. McManus, continuing): Of course, Champion for the entire period that they were servicing Ford had that same difficulty, didn't they? A. Well, Champion was, you might say, threatened by the possibility that we could change sources or enter the business.

Q. That's right. A. Yes, sir.

Q. And they made, during the period that they were servicing you, a good spark plug, is that correct? A. Yes, sir. Champion is an excellent company and have a [1021] long history of spark plug expertise.

Q. So long that a New Fostoria would have the same incentive to retain your business and try to keep you from going back to self-manufacturing, isn't that correct? A. that's correct.

I think our concern is that, in my judgment, the only two companies that would really have a bright outlook with a New Fostoria would be Champion and A. C.

Q. And that's your opinion? A. Yes.

Q. Thank you very much.

Mr. McManus: That's all.

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EXHIBIT GR-1

TABLE I

Rate of Return on Common Equity

Champion, 1952-1968

1952	28.7%
53	29.0
54	37.9
55	35.7
56	31.8
57	27.7
58	26.6
59	25.3
1960	23.7
61	20.2
62	19.1
63	18.8
64	19.8
65	20.6
66	21.3
67	21.1
68	23.8

Average: 25.4%.

Source: Value Line Investment Survey.

EXHIBIT FR-9B

ANOTHER EXAMPLE OF ABC – AUTOLITE BROAD COVERAGE



Now that just eight Autolite spark plug types cover 94% of all cars since 1955, two problems arise:

1. What to do with all that leftover shelf space?
2. What to do with all the money you don't have invested in inventory?

SOLUTION: Use the money to fill the shelves with other ABC (Autolite Broad Coverage) lines. Lines that require a minimum inventory investment for maximum market coverage. Like shock absorbers, service parts, carburetors, batteries, wire and cable.

1



AUTOLITE

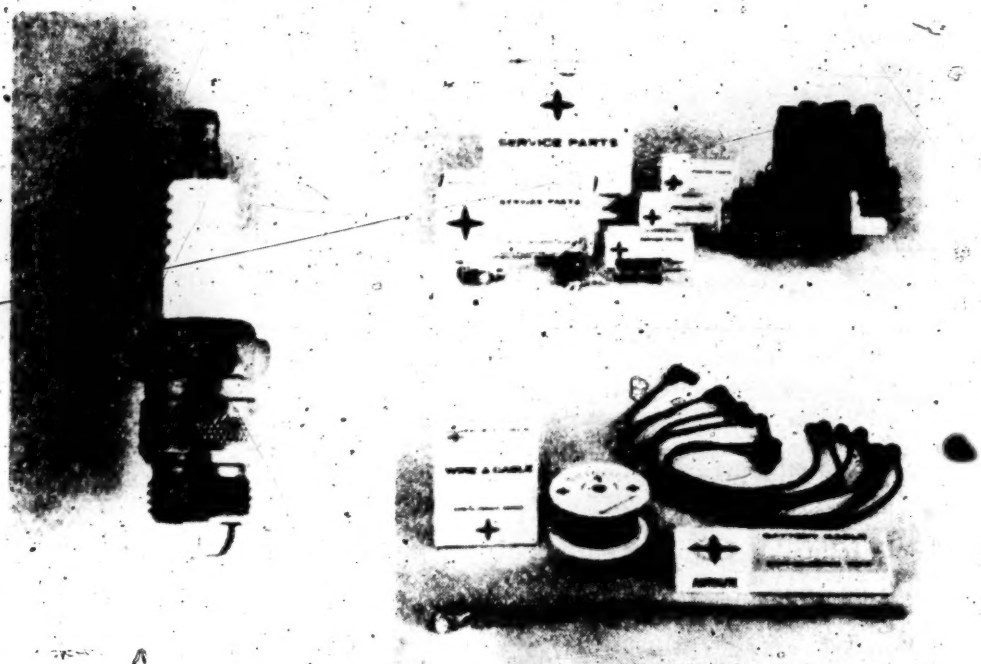
YOU'RE ALWAYS RIGHT WITH AUTOLITE

Popular Science, September, 19[illegible]

EXHIBIT FR-10B

756a

EXHIBIT FR-10D



Three good reasons why you should use Autolite to tune up Chrysler Corporation cars

Autolite Spark Plugs. They have a Power Tip that cleans itself while you drive, and a superior glass inner seal for good against compression leakage. The spark plug that gives you coverage of 98% of all passenger cars and light trucks with just 9 spark plug types.

Electrical Parts. You can get from your over 10,000 service parts. All Autolite Period Coverage) service parts that allow you to stock as few as 18 power sets and 11 condensers to provide coverage for 92% of American made cars.

Wire and Cable. Here again one phone call to your Autolite supplier will put you in the wire and cable business. Autolite offers a complete line of wire and cable. Unsurpassed quality in universal stripper sets, terminals, spark plug primary wire, anticorrosive battery cables and a full lineup of universal spark plug cables for all applications.

AUTOLITE



(This one's a bonus)

Dick Tracy. Selling Autolite quality across the country. Selling with National radio on NBC and CBS. Selling with National ads in Life, Post, Reader's Digest and True. Dick Tracy, who's calling attention to Autolite and to all dealers who handle the Autolite quality line.

Advertisement prepared by
BATTEN, BARTON, DURSTINE & OSBORN, INC.
for appearance in
Motor Magazine - Handbook - 1966 Issue
1 Page - B&W
P. O. No. 3052

EXHIBIT FR-11

REPLACEMENT SALES OF AUTOLITE SPARK PLUGS

(Millions of Units)

	Original Equipment Replacements	All Other Replacements	Total	Memo: O.E. % Tot
Prior to Acquisition				
1956	22.3	15.3	37.6	59.3
1957	25.8	17.5	43.3	59.6
1958	22.3	15.3	37.6	59.3
1959	26.3	18.2	44.5	59.1
1960	25.2	17.2	42.4	59.4
Subtotal	121.9	83.5	205.4	
Percent of Total	59%	41%		
Following Acquisition				
1961(a)	20.9*	29.3*	50.2	41.6
1962	32.9	28.8	61.7(b)	53.3
1963	37.5	22.5	60.0(b)	62.5
1964	47.2	21.7	68.9(b)	68.5
1965	51.5	22.5	74.0	69.6
Subtotal	190.0	124.8	314.8	
Percent of Total	60%	40%		
Total 10 Years				
Millions	311.9	208.3	520.2	
Percent of Total	60%	40%	100%	
Memo:				
Last 2 Years	98.7	44.2	142.9	
Percent of Total	69%	31%		
1966	55.2	22.6	77.8	70.9
1967	52.7	17.7	70.4	74.8
1968	77.6	25.6	103.2	75.2

Exhibit FR-11

(a) Electric Autolite and Ford Combined.

(b) Includes purchases of Autolite brand replacement plugs by Ford from Eltra.

Source: Total replacements from S. P. Stip., Paras. 59, 60, and 61. Break-out of original equipment replacements from detailed part number sales analysis performed by Ford.

* Explanation of unusually large share of "all other" replacements: "All other replacements" include Ford and L-M dealer replacements on 1961 and earlier Ford Motor Co. vehicles which did not use Autolite as original equipment. For example: in 1961, Ford sales of Autolite brand spark plugs were 11.9 million units. The majority of these represented replacements on 1961 and earlier Ford Motor Company vehicles on which Champion plugs were installed as original equipment. Technically, such replacements would, therefore, fall into the "all other" category notwithstanding the fact that the "Autolite" brand replacement plugs had been qualified for "original equipment" replacement. Treating such plugs as OE replacement, the "all other" category would be reduced to 17.4 or 45% of the total and consequently, the OE percent of total would be 55%. Note that the 1962 and 1963 figures would likewise be affected, but to a lesser extent.

EXHIBIT FR-12

TIMING OF SPARK PLUG PRICING ACTIONS
1961-1969

	Suggested Jobber Prices										
	Date of Change										
	As Of Jan. 1 1961	Mar. 1 1961	Feb. 1 1962	Jan. 1 1966	Jan. 1 1967	Jul. 1 1967	Jul. 1 1968	Sep. 1 1968	Oct. 1 1969	Nov. 1 1969	Dec. 1 1969
Autolite	$.44	$.45	$.48	$.45		$.48		$.51			$.54
Champion	.48			.45	$.48		$.51			$.54	
AC	.47	.48		.45	.48			$.51	$.54		

(a) Developed from price information supplied by Competitive Analysis Section, Pricing and Forward Plans.

Spark Plug Historical Price Data
Published Single Unit Prices
1949-1970

Prices as of January 1	Autolite Spark Plugs					Champion Spark Plugs				AC Spark Plugs			
	Suggested List Price	Suggested Stocking Dealer Price	Suggested Jobber Price	Lowest Acquisition Cost to WD		Suggested List Price	Suggested Stocking Dealer Price	Suggested Jobber Price	Lowest Acquisition Cost to WD	Suggested List Price	Suggested Stocking Dealer Price	Suggested Jobber Price	Lowest Acquisition Cost to WD
1949	$ .75	$.55	$—	$ —		$ .75	$.45	$.29	$ —	$ —	$—	$—	$ —
1950	.75	.55	—	—		.79	.47	.30	—	—	—	—	—
1951	.75	.55	—	—		.85	.51	.33	—	—	—	—	—
1952	.85	.51	—	—		.85	.51	.33	—	—	—	—	—
1953	.85	.51	—	—		.85	.51	.33	—	—	—	—	—
1954	.85	.52	.33	—	Electric Autolite Company	.85	.53	.35	—	.85	.53	.36	—
1955	.85	.53	.34	—		.85	.52	.35	—	.85	.53	.35	—
1956	.87	.55	.36	—		.93	.56	.39	—	.93	.53	—	—
1957	.93	.62	.39	—		.93	.56	.39	—	.93	.53	—	—
1958	.93	.62	.39	.3058		1.03	.61	.45	.3660	1.03	.61	.45	.3600
1959	1.03	.69	.43	.3371		1.08	.61(b)	.45	.3660	1.03	.61(b)	.45	.3600
1960	1.03	.69	.43	.3371		.95(a)	.67	.48	.3857	1.03	.61	.45	.3600
1961	1.08	.73	.44	.3449		1.08	.67	.48	.3857	1.07	.66	.47	.3760
1962	1.08	.74	.45	.3528		1.08	.67	.48	.3857	1.08	.67	.48	.3840
1963	1.08	.67	.48	.3763		1.08	.67	.48	.3857	1.08	.67	.48	.3840
1964	1.08	.67	.48	.3763	Autolite Division Ford Motor Company	1.08	.67	.48	.3810	1.08	.67	.48	.3840
1965	1.08	.67	.48	.3763		1.08	.67	.48	.3810	1.08	.67	.48	.3840
1966	1.05	.64	.45	.3528		1.05	.64	.45	.3572	1.00	.64	.45	.3600
1967	1.05	.64	.45	.3528		1.12	.68	.48	.3810	1.07	.68	.48	.3840
1968	1.10	.68	.48	.3763		1.12	.68	.48	.3810	1.07	.68	.48	.3744
1969	1.15	.72	.51	.3998		1.17	.72	.51	.3948	1.20	.74	.51	.3930
1970	1.20	.72	.54	.4234		1.24	.72	.54	.4181	1.25	.78	.54	.4200

(a) On November 2, 1959 Champion implemented the policy of publishing a reduced list price in order to allow dealers to charge for installation. This policy was rescinded July 15, 1960.

(b) Price for 10-49 Spark Plugs.

Source: Competitive Analysis Section Pricing and Forward Plans Department Autolite-Ford Parts Division.

EXHIBIT FR-13

761a

Spark Plug, Service Parts and Battery Sales and Numbers of Autolite Distributors by Lines Carried During Three Periods of Progressive Merchandising Policies

	Spark Plug Sales (000)						Number of Autolite Distributors				Dollar Sales (Millions) To Autolite Distributors		
	Autolite Distributors		Ford Dealer		Total		Carrying The Full Line (Plug, Service Parts and Battery)	Carrying The Plug Line and Either The Battery Line Or Some Part Of The Service Part Line	Carrying The Spark Plug Line Only	Carrying Some Part Of The Service Parts Line and/or The Battery Line But Not The Plug Line	Plugs	Service Parts And Battery	Total
	Unit Sales	% Industry	Unit Sales	% Industry	Unit Sales	% Industry							
First Period: Reliance Upon Advertising and Sales Promotions													
1961(a)	38.6	9.8	17.6	4.5	56.2	14.3	NA	NA	NA	NA	$13.1	$42.6	$ 55.7
1962	42.0	10.3	15.0	3.7	57.0	14.0	NA	NA	NA	NA	20.2	35.8	56.0
1963	39.6	9.2	15.5	3.6	55.1	12.8	32	238	73	902	19.0	36.9	55.9
Second Period: Diversion of the Ford Dealer Spark Plug Business from Ford to Jobbers													
1964	48.3	10.6	18.4	4.0	66.7	14.6	44	264	72	897	23.2	38.4	61.6
1965	62.8	13.0	8.6	1.8	71.4	14.8	65	277	63	836	30.1	36.3	66.4
1966	69.5	13.7	8.3	1.6	77.8	15.3	86	296	61	796	31.3	42.0	73.3
Third Period: (i) Diversion of the Ford Dealer "Autolite" Battery and Service Parts Business from Ford to Jobber (ii) Servicing of Distributors by Ford Parts Depots													
1967(b)	62.1	11.7	8.3	1.6	70.4	13.3	403	191	55	518	29.7	53.1	82.8
1968	92.7	16.7	10.5	1.9	103.2	18.6	781	100	35	290	44.2	69.8	114.0
1969	96.6	16.7	13.2	2.2	109.8	18.9	868	65	16	199	49.3	92.7	142.0

(a) Autolite distributor spark plug sales include 9.5 MM sales by Electric Autolite in First Quarter of 1961. Ford dealer sales include 6.5 MM FoMoCo packaged Champion spark plugs. Electric Autolite sales and purchases of Champion spark plugs were taken from paragraphs 57 and 63 of the stipulations.

(b) Batteries have been handled exclusively through independent distributors since July 1, 1967.

EXHIBIT FR-3

7548

EXHIBIT FR-27

TYPE OF SERVICE OUTLET NORMALLY USED FOR ENGINE TUNE-UP BY AGE OF VEHICLE

Type Of Outlet	Age Of Vehicle 0-2 Years Old	3-5 Years Old	Average 0-5 Years Old
Service Station	27%	35%	31%
Independent Garage	15	20	18
Performs Own Work	7	10	9
Specialty Shop	4	4	4
Mass Merchandiser	2	2	2
Other	1	2	1
Total Non-Dealership	56%	73%	65%
Dealership	44	27	35
Total	100%	100%	100%
Memo:			
Would Use Dealership If Repair Not Covered By Warranty	34%	24%	29%

Source: Study Of Attitudes Toward and Satisfaction With Various Service Sources—Market Facts, Inc., March, 1969.

EXHIBIT FR-40

U. S. Replacement Market Spark Plug Brands
by Manufacturer

(*Automotive Original Equipment)

General Motors	*Outlets*
*AC	
Ford Motor Company	
*Autolite	
Champion Spark Plug Company	
*Champion	
*MoPar	Independent Distributors
AllState	Sears
Atlas	Standard Oil Licensees
Chrysler	Chrysler Dealers
Double Check	Pep Boys Stores
FedMar	FedMar Stores
Harley Davison	Harley Davison Dealers
NAPA	NAPA Distributors
Power Ready	Gulf & Western Distributors
Riverside	Montgomery Wards
Texaco	Texaco Dealers
K-Mart	K-Mart Stores
The Prestolite Company	
AA	Automotive Associates Distributors
AC	Allis Chalmers Dealers
Allcar	Allcar Distributors
Arlans	Arlans Stores
Atlas	Standard Oil Licensees
Auto-Fire	W. T. Grant Stores
Auto-Mark	Speed Shops
Borg Warner	Shurhit Jobbers
Clark	Clark Dealers
Co-Op	National Cooperative Dealers (Farm Co-Op)

Exhibit FR-40

The Prestolite Co. (Contd.)

Fisk	K-Mart Stores
Foremost	J. C. Penney Stores
Gibson	Gibson Stores
Guardian	Benney's Stores
L.P.M.	Lift Parts Distributors
Long Life	Oklahoma Tire & Rubber Supply Stores
M-F	Massey-Ferguson Dealers
NAPA	NAPA Distributors (small engine)
National Lease	Fleets
Premium	W. T. Grant Stores
Prime Line	John R Parts Distributors
Prestolite	
Rite-Line	Mass Merchandisers
Sierra	Sierra Supply Co. Distributors
Towmotor	Towmotor Dealers
UDS	U.D.S. Distributors
White Supreme	White Auto Stores
Wizard	Western Auto Stores

Zeller Manufacturing

Blue Crown	Independent Distributors
Coast-to-Coast	
Fire Crown	
Fire Injector	
Motor Master	
Wizard	Western Auto Stores

Other U. S. Manufacturers and/or Marketers

Acme
Aldor
Auburn
Doering Disc-Matic
Leonard
Olympic
Parkway

Exhibit FR-40

Ranch-Rite
Stitt
Stromberg
Trojan
Vornado
Yale & Towne

Foreign

•Bosch
•Beru
•Denso
•Hitachi
•KLG
•Lodge
•Marchelle

EXHIBIT FR-41

U. S. Replacement Spark Plug Market
1969

Base: 585 MM Units

Shares by Company (U. S. Mfgrs. only)	%
Champion Spark Plug Company	40
General Motors Corporation	35
Ford Motor Company	18
Others	7
	100%

Shares by Brand (Including Imports)	%
Champion	37
AC	35
Autolite	18
Import O.E. Brands	2
Non-O.E.	8
	100%

EXHIBIT FR-42

ELTRA'S ESTIMATES OF NON-O.E. BRAND U. S. REPLACEMENT SPARK PLUG MARKET

A. Trend in Percentage of Non-O.E. Brand Market Shares.

	%		%
1961	2.6	1971	9.0
1962	4.3	1972	10.0
1963	4.9	1973	11.0
1964	*	1974	12.0
1965	*	1975	13.0
1966	5.4	1976	14.0
1967	6.2	1977	15.0
1968	7.0	1978	16.0
1969	8.0	1979	17.0
1970	8.0	1980	17.0

* Not taken.

B. Market (In Millions)

	1969	1980
Total Replacement	585 MM	857 MM
Non-O.E. Brand Share	.08	.17
Total Non-O.E. Brand	46.8 MM	145.0 MM

C. Non-O.E. Brand Market Share Estimated by Company

	1969	%	1980	%
Champion Spark Plug	20.3 MM	43	73.0 MM	50
ELTRA	17.5 MM	38	58.0 MM	40
**Others	9.0 MM	19	14.0 MM	10
	46.8 MM		145.0 MM	

** (Zeller Corp.; Auburn Spark Plug Co., Inc.; Leonard Spark Plug Co.; A. L. Doering Spark Plug Co.; Trojan Products Co.; Stitt Spark Plug Co.; Hered Sales Co.)

EXHIBIT FR-43

ELTRA'S FORECAST OF ITS PARTICIPATION IN ESTIMATED PRIVATE BRAND PORTION OF MASS MERCHANDISERS' SHARE OF REPLACEMENT SPARK PLUG MARKET BY 1980

Mass Merchandisers' Share of Replacement Market

1969	
Total Replacement Market In Units	585 MM
Mass Merchandisers % of Market—*All* brands of plugs (i. e. AC, Champion, Autolite as well as Private Brands)	28%*
No. of Units—*All* brands	163.8 MM
Mass Merchandisers % of Market—Private Brands only	4.4%
No. of Units—Private Brands only	26. OMM
1980	
Total Market in Units	857 MM
Mass Merchandisers % of Market—*All* brands	28%
No. of Units—All brands	240. OMM
Mass Merchandisers % of Market—Private Brands only	10%
No. of Units—Private Brands only	85.7 MM

ELTRA'S Participation

1969	
% of Mass Merchandisers Private Brand Sales	17.0%
No. of Units	4. OMM
1980	
% of Mass Merchandisers Private Brand Sales	25.0%
No. of Units	22. OMM

* Reference: Stanford Research Institute: "Opportunities in the Changing Aftermarket." (1969)

EXHIBIT FR-49

ELTRA'S FORECAST OF ITS PARTICIPATION IN ESTIMATED PRIVATE BRAND PORTION OF OIL COMPANIES' SHARE OF REPLACEMENT SPARK PLUG MARKET BY 1980

Oil Companies' Share of Replacement Market

	1969
Total Market in Units	585 MM
Oil Stations % of Market—All brands	25.5%*
No. of Units—All brands	149.2 MM
Oil Companies % of Market—Private Brands Only	1.9%
No. of Units—Private Brands Only	11 MM

	1980
Total Market in Units	857 MM
Oil Stations % of Market—All brands	25.5%
No. of Units—All brands	218.5 MM
Oil Companies % of Market—Private Brands	5.0%
No. of Units—Private Brands	42.9 MM

ELTRA'S Participation

	1969
% of Oil Companies Private Brand Sales	59%
No. of Units	6.5 MM

	1980
% of Oil Companies Private Brand Sales	60%
No. of Units	25 MM

* Reference Stanford Research Institute: "Opportunities in the Changing Automotive Aftermarket." (1969)

Opinion of the District Court on Relief

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF MICHIGAN

SOUTHERN DIVISION

Civil Action No. 21911

UNITED STATES OF AMERICA,

Plaintiff,

—v.—

FORD MOTOR COMPANY and THE ELECTRIC AUTOLITE COMPANY,

Defendants.

OPINION

FREEMAN, *Chief Judge*:

This is a proceeding to determine what relief should be entered in this antitrust case. In April 1961 Ford acquired, by purchase, certain assets of the Electric Autolite Company:[1] 1) a spark plug factory in Fostoria, Ohio; 2) a battery factory in Owosso, Michigan; and, 3) the trade name "Autolite." Within a few days after the contract of purchase was executed, the Government requested information from Ford concerning the acquisition and in November 1961 this suit was filed. On June 10, 1968, this

[1] Now known as Eltra Corporation.

court held that the acquisition violated Section 7 of the Clayton Act in the spark plug and battery lines of commerce, 286 F. Supp. 407. During the next year the parties negotiated with each other in an unsuccessful attempt to agree on appropriate relief. Proposed orders of relief were then filed with the court, along with briefs. Beginning January 12, 1970, nine days of testimony were taken concerning the relief issue. Further briefs were submitted following the hearing and oral argument was heard on April 2, 1970.

I

The Proposals

Basically, the Government requests complete divestiture of the assets acquired by Ford as well as a subsequently constructed battery plant in Shreveport, Louisiana. It is also proposed that Ford be prohibited from manufacturing spark plugs for ten years and that it be required to purchase a declining percentage of its spark plug needs from the operator of the divested spark plug factory (hereinafter referred to as "New Fostoria"), which spark plugs are to be labeled "Autolite."

On the other hand, Ford proposes that it be permitted to retain the facilities acquired from the Electric Autolite Company, together with the trade name "Autolite"; that Ford provide Eltra Corporation with certain machinery to increase its production capacity; and that Ford purchase 30,000,000 spark plugs per year from Eltra for ten years. In this way Ford proposes to raise Eltra's spark-plug-making capacity to about 56,000,000 plugs per year from the present production of 17,000,000 and at the same time provide Eltra with an outlet for the sale of these additional

spark plugs. Finally, Ford would be enjoined from acquiring any other spark plug or battery plant for ten years and from construction in the United States of additional facilities for the manufacture of automotive batteries other than where its existing battery factories are located for five years.

It is difficult to conceive of proposals for relief that are farther apart and that share less common ground. It is in just this kind of situation where someone is most likely to be seriously injured. For this reason and because of the possibly very serious adverse consequences to the Fostoria community, which have been brought to the court's attention by counsel for Fostoria, appearing as *amicus curiae*, the court has proceeded most carefully and deliberately in determining what relief it will decree.

> "Judges in prescribing remedies have known their own limitations. They do not *ex officio* have economic or political training. Their prophecies as to the economic future are not guided by unusually subtle judgment. They are not so representative as other branches of the government. The recommendations they receive from government prosecutors do not always reflect the over-all approach of even the executive branch of the government, sometimes not indeed the seasoned and fairly informed judgment of the head of the Department of Justice. Hearings in court do not usually give the remote judge as sound a feeling for the realities of a situation as other procedures do. Judicial decrees must be fitted into the framework of what a busy, and none too expert, court can supervise. Above all, no matter with what authority he is invested, with what facts and opinion he is supplied, a trial judge is

only one man, and should move with caution and humility." *United States* v. *United Shoe Machinery Corp.*, 110 F.Supp. 295, 347-348 (D. Mass. 1953).

II

Spark Plugs

While familiarity with the court's opinion on merits is assumed, it is appropriate to restate the two reasons why the acquisition was found to substantially lessen competition in the spark plug line of commerce. First, the court held that prior to entry into the spark plug market in 1961, Ford had a pervasive impact on the aftermarket in that it "moderated all of Champion's replacement-sales policies directly and, given the oligopolistic structure in which Champion was the keystone, must have touched those of the others derivatively." 286 F.Supp. at 437.

> "An interested firm on the outside has a twofold significance. It may someday go in and set the stage for noticeable deconcentration. While it merely stays near the edge, it is a deterrent to current competitors. *United States* v. *Penn-Olin Chemical Co.*, 378 U.S. 158 . . . (1964). This was Ford uniquely, as both a prime candidate to manufacture and the major customer of the dominant member of the oligopoly. Given the chance that Autolite would have been doomed to oblivion by defendant's grass-roots entry, which also would have destroyed Ford's soothing influence over replacement prices, Ford may well have been more useful as a potential than it would have been as a real producer, regardless how it began fabrication." *Id.*, at 441.

See *FTC* v. *Procter & Gamble Co.*, 386 U.S. 568 (1967), and *United States* v. *El Paso Natural Gas Co.*, 376 U.S 651 (1964).

The second ground for finding a violation of Sec was the foreclosure of Ford as a purchaser of a per cent of total industry output. 286 F.Supp. Thus, companies presently making spark plugs and who might desire to enter in the future are hurt by this reduction in their possible sales.

In short, Ford's entry into the spark plug market by means of the acquisition of the factory in Fostoria and the trade name "Autolite" had the effect of raising the barriers to entry into that market as well as removing one of the existing restraints upon the actions of those in the business of manufacturing spark plugs.

It will also be noted that the number of competitors in the spark plug manufacturing industry closely parallels the number of competitors in the automobile manufacturing industry and the barriers to entry into the auto industry are virtually insurmountable at present and will remain so for the foreseeable future. Ford's acquisition of the Autolite assets, particularly when viewed in the context of the original equipment (OE) tie and of GM's ownership of AC, has the result of transmitting the rigidity of the oligopolistic structure of the automobile industry to the spark plug industry, thus reducing the chances of future deconcentration of the spark plug market by forces at work within that market.

The relief granted must be designed to eradicate the tendencies of the acquisition to substantially lessen competition in the context of the present market and economic conditions. *United States* v. *Continental Can Co.*, 378 U.S.

441, 461 (1964); *United States* v. *E. I. DuPont De Nemours & Co.*, 366 U.S. 316, 325-26 (1961); and *United States* v. *Crescent Amusement Co.*, 323 U.S. 173, 188 (1944).

> "The protection of the public interest is the purpose of the statute and it is served when a violation of the statute has been found and the relief effectively pries open to competition a market that has been closed by defendant's illegal restraints." *United States* v. *Aluminum Company of America*, N.D.N.Y., April 27, 1966, CCH Trade Cases 1967, ¶ 71, 980.

To this end divestiture has been described as "the most important of antitrust remedies. It is simple, relatively easy to administer, and sure. It should always be in the forefront of a court's mind when a violation of § 7 has been found." *United States* v. *E. I. DuPont De Nemours & Company, supra*, at pp. 330-331.

In its discussion of general considerations concerning "that most drastic, but most effective, of antitrust remedies" the Supreme Court, in *DuPont*, reiterated the criteria to be applied in determining the relief to be granted in an antitrust case:

> "In *United States* v. *American Tobacco Co.*, 221 U.S. 106, 185 (1911), we said:
>
> > 'In considering the subject . . . three dominant influences must guide our action: 1. The duty of giving complete and efficacious effect to the prohibitions of the statute; 2, the accomplishing of this result with as little injury as possible to the interest of the general public; and, 3, a proper regard for the vast interests of private property which may have

become vested in many persons as a result of the acquisition . . . .'" *Id.*, at 327-28.

The Court also stated:

"If the Court concludes that other measures will not be effective to redress a violation, and that complete divestiture is a necessary element of effective relief, the Government cannot be denied the latter remedy because economic hardship, however severe, may result. *Economic hardship can influence choice only as among two or more effective remedies.*" *Ibid.*, p. 327. [Emphasis added.]

Finally, the Court also made the following observation:

"The burden is not on the Government to show *de novo* that a 'pass through' of the General Motors vote, like du Pont's ownership of General Motors stock, would violate § 7. *United States* v. *Aluminum Co. of America*, 91 F.Supp. 333, 346 (D.C.S.D.N.Y. 1950). It need only appear that the decree entered leaves a substantial likelihood that the tendency towards monopoly of the acquisition condemned by § 7 has not been satisfactorily eliminated." *Id.*, pp. 331-32.

Ford argues that divestiture is unnecessary, and therefore punitive, because under its proposal there will be four major spark plug manufacturers rather than the three that will result, if divestiture is ordered. Ford assumes that Eltra will be forced out of the spark plug business in the event of divestiture. It asserts that its proposal leads to a more competitive spark plug manufacturing industry than existed either before the acquisition or will exist after divestiture. This position was dealt with in the court's Opinion on merits.

"... Unable to traverse several of the pivotal factual premises underlying plaintiff's contentions and hesitant about the validity of others, much of the defense speaks in the tenor of a demurrer. For instance, Ford admits it was a potential *de novo* spark-plug producer in the late 1950's, but denies that the assumption of Fostoria and 'Autolite' is likely to impair competition. Ford's position is rooted in its previously mentioned misinterpretation of the aim of Section 7 as the simple preservation of the number of consumer alternatives, which defendant acknowledges as it must under *United States* v. *Penn-Olin Chemical Co.*, 278 U.S. 158 ... (1964), includes would-be as well as existing industry entrants. If this were the solitary objective of the statute, a quick roll call would dispel the possibility of a violation. No firm has exited since 1960 in reaction to the asset transfer and none appears about to; and, whereas in that year Electric Autolite was a producer and Ford an inchoate fabricator, now ELTRA and Ford are both viable plug makers. Indeed, an extension of this reasoning permits defendant to go further and put forth the assertion that the market is better structured today because two *de facto* competitors should wield more beneficial force than one extant and the other contingent. This analysis may be persuasive in some settings but the spark-plug arena is not one of them." At pp. 436-37.

Moreover, Ford assumes that the court should look to the level of the ultimate consumer in fashioning its relief. It then points out that spark plugs of all major brands are available at prices well below the suggested retail price of $1.20 to $1.25. This is true, but such availability is in

no way the result of manufacturers' efforts. The anti-competitive effects flowing from the acquisition are at the manufacturing level and at that level the lowest acquisition cost of AC, Champion and Autolite spark plugs to warehouse distributors varies by less than one cent.[2] This consistency in price has prevailed since 1963.

It appears to the court that, in view of the structural effects of this acquisition which have been found to be likely to substantially lessen competition in the spark plug industry, the only remedy that will effectively correct the situation is that of divestiture. In no other way can the foreclosure of Ford be overcome. The same is true of Ford's pre-1961 impact on the actions of Champion and the other major manufacturers of spark plugs.

> "The case falls squarely within the principle that where there has been a 'history of tendency toward concentration in the industry' tendencies toward further concentration 'are to be curbed in their incipiency.' *Brown Shoe Company* v. *United States,* 370 U.S., at 345, 346." *United States* v. *Continental Can Company,* 378 U.S. 441, 461.

The effects of the acquisition are particularly apparent today. For the first time in many years there is a rising wind of new forces in the spark plug market which may profoundly change it. It is true that these forces are not all tending in the same direction. But it is the purpose of the antitrust laws and the duty of this court to free these forces from the unlawful restraint imposed upon them so that they may run their natural course.

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[2] As of January 1, 1970, these prices were: Autolite: $.4234; Champion: $.4181; and AC: $.4200. See Exhibit FR-13.

Historically, the overwhelming majority of replacement spark plugs have been dispensed by a mechanic in a service station or independent garage. Being relatively unsophisticated in the fine points of spark plug technology and being fearful of serious damage to the motor resulting from an improper choice of plug, he has a propensity to select the brand sanctioned by the builder of the motor that he is working on. For this reason it has been absolutely necessary for the would-be spark plug maker to have his product installed in cars as original equipment if he is to have any chance of selling in the aftermarket. Indeed, this is the reason that plugs are sold to the manufacturers for OE installation at six cents each—one-third the cost of making a plug. 286 F.Supp. at 433-436.

It appears from the testimony of Mr. Fiene, Vice President for Marketing of the Prestolite Division of Eltra Corporation, and Exhibits FR-42 and 43, that the private brand sector of the plug market will grow substantially during the next ten years because of changes in marketing methods. The mass merchandisers are beginning to enter the plug marketing field in force. They not only sell all brands of plugs over the counter, but they are building service bays. In these bays many carry only spark plugs under their own proprietary brand. Exhibit FRC-44. He expects that the share of the spark plug market accounted for by private brand sales of the mass merchandisers will increase from the present 4.4 per cent to 10 per cent, or 85.7 million spark plugs, by 1980. See Exhibit FR-43. He also expects oil companies, other than Standard which is now in the market, to enter the private label field by 1980 so that the total private brand portion of the plug market will then represent about 17 per cent of the total replacement spark plug market, or 145 million units. See Exhibit FR-42.

Ford necessarily accepts these figures since its entire relief proposal is premised on the assumption that they are reasonably accurate.

The importance of these figures lies in the fact that they reveal that forces are now at work within the spark plug market that may well lead to its eventual deconcentration by increasing the number of potential customers for a new entrant into the plug manufacturing business and reducing the need for original equipment identification. Yet, at present, these forces are restrained more than they would otherwise be on account of the present oligopolistic structure of the spark plug manufacturing industry. It appears that neither AC nor Autolite sell private label plugs. It is in the self-interest of the OE plug manufacturers to discourage private brand sales and to strengthen the OE tie.[3] To the extent that the spark [plug] manufacturers are not owned by the auto makers, it seems clear that they will be more favorably disposed toward private brand sales and will compete more vigorously for such sales. Also, the potential entrant continues to have the chance to sell not only the private brand customer but the auto maker as well.

The court wishes to note here that although it finds that divestiture is the only effective remedy, it does not agree with the Government that the remedy should be affirmatively designed to "break the OE tie." The remedy is designed to correct the violations of Section 7 found by the court. The OE tie, as such, does not violate Section 7.

It also appears to the court that certain injunctive provisions are required in order that divestiture may be made effective and to give New Fostoria an opportunity to establish its competitive position.

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[3] Private brand plugs are sold at 26 to 28 cents each, while OE plugs are sold at about 40 cents each.

From the date of sale of the Fostoria facility, Ford will be prohibited from manufacturing spark plugs for a period of ten years; will be required to purchase one-half of its total annual requirements of spark plugs from the New Fostoria bearing the Autolite label for a period of five years and for this purpose Ford's "annual requirements" shall include those spark plugs presently made at the Fostoria plant for export accounts; and Ford shall not be permitted to use or market a private label spark plug for five years.

Also, Ford shall be prohibited from selling spark plugs to its dealers at less than the prevailing jobbers' selling price for ten years after divestiture, and to the extent that it sells Autolite plugs to its dealers, these plugs shall be packaged and numbered identically as those obtained by dealers from independent jobbers. Ironically, it was Ford that made this court so painfully aware of the difficulty a spark plug manufacturer has in persuading warehouse distributors to carry a new line of spark plugs. Indeed, the evidence establishes that Ford was unable to assemble an adequate distribution system in the aftermarket for its Autolite spark plugs over a six-year period, until it raised the price of spark plugs sold to its dealers to a level where jobbers could compete for the dealer business. Only by diverting this dealer business was it able to obtain warehouse distributors who, in turn, pushed the sale of Autolite plugs in other channels of the replacement market.

A great part of Ford's defense to the Government's proposal centered on the contention that the New Fostoria could not survive. Part of that assertion was founded on the premise that two-thirds of the present Autolite distribution would be lost to the New Fostoria immediately upon divestiture and that the remaining one-third might well deteriorate rapidly. One of the major reasons that

two-thirds of its distribution system would vanish is that Ford expects to resume selling plugs to its dealers at a much reduced price and one which jobbers could not meet. In order to give the New Fostoria time to establish itself, Ford must continue its present policy of selling spark plugs to its dealers at prices competitive with those obtainable from independent jobbers. In this way most of Autolite's present distribution can be preserved to the New Fostoria for an interim period.

The court also takes notice of the very significant place that the spark plug plant has in the economic picture in Fostoria. This factory employs about 1,540 persons, or one-third of the employment in the community. According to the testimony of Mr. Graber, Financial Secretary of the Union representing the employees at this factory, about one-half of the persons employed at the plant are over forty years of age. Also, Mr. McCambridge, Superintendent of Schools in Fostoria, and Mr. Peeler, the Mayor of Fostoria, explained how this plant and employment affect the City's finances and proposed capital improvement program.

While the court is limited in its ability to protect the employees of the Fostoria plant, it can and will order that, as a condition of sale, the purchaser of the plant must agree to carry out all wage and pension obligations of Ford as of the time of sale. Also, if Ford removes the non-plug operations[*] from the Fostoria plant to other factories owned by it, to the extent that new jobs are thereby created at these factories, Ford must offer employment to those at the Fostoria plant displaced by the transfer. Ford shall bear the cost of relocating those who accept such offers.

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[*] These operations account for about fifty jobs.

Opinion of the District Court on Relief

In order that Ford shall have ample time to find a buyer for the Fostoria spark plug factory and the "Autolite" trade name, it shall have until December 31, 1971, to divest itself of these assets.

III

Batteries

In its Opinion on merits, this court found that the acquisition of the Owosso battery plant and Autolite name violated Section 7 of the Clayton Act because it was the primary vehicle by which substantial foreclosure of Ford purchases was ultimately to be achieved. The objective of foreclosure would require construction of other factories around the country. 286 F.Supp. at 429.

If the operative facts surrounding Ford's battery requirements and the number of batteries sourced internally were the same today as they were in 1964, this court might well hesitate to order divestiture of the Owosso battery plant in favor of some form of injunctive relief. However, Exhibit FR-29 clearly shows that by 1971 Ford will have foreclosed 80 per cent of its battery needs. This will have been accomplished by expansion of the Owosso facility and construction of a new factory in Louisiana. Since foreclosure has already been largely achieved, injunctive provisions prohibiting acquisition or construction of new plants and expansion of existing facilities are inadequate. Therefore, Ford will be directed to divest itself of the Owosso battery factory.

It does not follow, however, that divestiture of the Shreveport plant must also be decreed as the Government desires. Batteries cannot be shipped long distances economically. 286 F.Supp. at 423. The Shreveport plant was

constructed by Ford but was not a fruit of the acquisition. Ford did not acquire special technical information or use of patents, nor had the Shreveport plant been previously planned by the Electric Autolite Company, thus distinguishing *United States* v. *Aluminum Company of America*, 247 F.Supp. 308, 315, 316 (E.D. Mo. 1965), *aff'd*, 382 U.S. 12 (1965), relied upon by the Government to support such divestiture.

Shorn of the trade name "Autolite" and the Owosso facility, Ford is hardly likely to foreclose its need for batteries from the Shreveport factory. The Shreveport plant represents internal expansion, which is not proscribed by Section 7.

Ford will also be prohibited from acquiring or building any new battery plant or expanding the Shreveport plant for five years from divestiture of the Owosso plant.

The court retains jurisdiction of this suit to effectuate and assure compliance with the terms and provisions of the judgment to be entered.

An appropriate form of judgment shall be submitted.

RALPH M. FREEMAN
Chief United States District Judge

Dated: July 7th, 1970.

Final Judgment of the District Court

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF MICHIGAN

SOUTHERN DIVISION

Civil Action No. 21911

UNITED STATES OF AMERICA,

Plaintiff,

v.

FORD MOTOR COMPANY and THE ELECTRIC AUTOLITE COMPANY,

Defendants.

FINAL JUDGMENT

Plaintiff, the United States of America, having filed its complaint herein on November 27, 1961; full trial on all issues of liability and relief being had; and the parties having briefed the court on all issues of fact and law:

NOW, THEREFORE, it is hereby ORDERED, ADJUDGED AND DECREED as follows:

I.

This Court has jurisdiction of the subject matter hereof and of the parties hereto.

The acquisition in 1961 by Ford Motor Company of a battery plant in Owosso, Michigan, a spark plug plant in

Fostoria, Ohio, and the tradename and trademark "Autolite", from the defendant The Electric Autolite Company, violated Section 7 of the Clayton Act.

II.

As used in this Final Judgment:

(A) "Person" means any individual, partnership, firm, corporation, association or other business or legal entity;

(B) "Ford" means Ford Motor Company, a Delaware corporation;

(C) "Subsidiary" means any person controlled by, or more than fifty per cent of whose voting stock is directly or indirectly controlled by, defendant.

III.

The provisions of this Final Judgment shall apply to defendant Ford and to each of its subsidiaries, successors and assigns, and to each of their respective officers, directors, agents, employees, successors and assigns, and to those persons in active concert or participation with any of them who receive actual notice of this Final Judgment by personal service or otherwise.

IV.

No later than eighteen (18) months after this Judgment is not subject to further appeal, Ford shall divest itself of all of its interest in the tradename and trademark "Autolite" and all of its facilities in the United States for the production of automotive batteries and spark plugs, except a battery plant located at Shreveport, Louisiana. Said pro-

duction facilities shall be divested in going, viable and operating condition.

The assets to be divested shall include the tradename and trademark "Autolite" and the spark plug and battery production facilities which were acquired from The Electric Autolite Company by Ford in 1961, and all improvements, betterments, replacements and additions made thereto by Ford since such acquisition up to the date of divestiture.

Divestiture of the facilities for the production of automotive batteries may be made separately but in any event, the tradename and trademark "Autolite" and the facilities for the production of spark plugs (hereinafter referred to as Autolite assets) shall be disposed of as a unit.

V.

For a period of ten (10) years from the date of divestiture of the Autolite assets, Ford is enjoined from manufacturing spark plugs in the United States.

VI.

For a period of five (5) years from the date of divestiture of the Autolite assets:

(A) Ford shall purchase from, and the person acquiring the divested Autolite assets shall furnish and sell to Ford, at least one-half of Ford's annual requirements of spark plugs, such spark plugs to be labeled with the "Autolite" name and/or trademark, to conform to Ford's designs, specifications, quality standards and delivery requirements and to be priced competitively. For the purpose of this paragraph, Ford's annual requirements shall be the annual total number of spark plugs needed by Ford for installa-

tion in vehicles and engines manufactured and/or sold in the United States and all spark plugs needed by Ford for export from the United States and for resale to dealers, warehouse distributors, jobbers, national accounts or others in the United States.

(B) Ford shall not use or market in, or import into, the United States any spark plugs bearing a tradename or trademark owned by or licensed to Ford. The restriction contained in this sub-section VI(B) shall not apply to any spark plugs bearing the tradename and/or trademark "Autolite" which are manufactured by or for Ford outside of the United States and are installed in vehicles and engines imported into and sold by Ford in the United States.

VII.

For a period of ten (10) years from the date of divestiture of the Autolite assets Ford is enjoined from at any time selling spark plugs in the United States to its franchised automobile dealers at a price less than its prevailing minimum suggested jobbers' selling price. To the extent that Ford sells "Autolite" branded spark plugs to its franchised automobile dealers in the United States, such spark plugs shall be packaged and numbered identically as those sold by Ford to purchasers other than its franchised dealers in the United States.

VIII.

(A) The person acquiring the Autolite assets shall, as a condition of purchase, submit to the jurisdiction of this Court for entry of further orders as this Court may deem appropriate and agree to carry out all wage and pension

obligations of Ford as may exist at the Fostoria, Ohio plant as of the date of acquisition.

(B) Should Ford remove to other of its factories operations at the Fostoria, Ohio plant not relating to the manufacture of spark plugs, then to the extent that new jobs are thereby created at such other Ford factories, Ford shall offer employment at such other factories to those employees at the Fostoria, Ohio plant who would be displaced by such removal. Ford shall bear the cost of relocating those employees who accept such offers of transfer.

IX.

Ford shall use its best efforts to maintain the assets to be divested until the time of divestiture thereof as going and viable, at standards of operating performance prevailing at the time of entry of this Final Judgment.

X.

No divestiture shall be made directly or indirectly, to any person who is at the time of divestiture (a) an officer, director, employee, or agent of Ford, or (b) who beneficially owns, or has power to vote, or controls, or has rights to own or control, more than one per cent (1%) of the outstanding shares of stock of Ford, or (c) in whom Ford has a financial interest whether by any equity interest or otherwise other than as may arise out of a customer or supplier relationship, provided, however, that this provision shall not apply to an interest arising out of the conversion of a debt interest acquired incident to a sale or other credit transaction and disposed of within a reasonable period of time.

If divestiture is accomplished in whole or in part by distribution of stock, defendant Ford shall require that any officer or director of Ford, or any stockholder of Ford beneficially owning or controlling, or having rights, in excess of an aggregate of one per cent (1%) of defendant's outstanding shares entitled to vote, shall within six (6) months of receipt of divested stock dispose of all divested stock to a person not described in this Section X.

XI.

(A) If defendant proceeds with divestiture by sale, then not less than sixty (60) days prior to the closing date designated in any contract for the sale of the assets or stock to be divested, defendant shall advise plaintiff in writing of the name and address of the proposed purchaser together with the terms and conditions of the proposed sale, and such other information concerning the transaction as plaintiff may request. At the same time, defendant shall also make known to plaintiff in writing the names and addresses of any other person or persons who have made an offer in writing, or expressed in writing a desire, to purchase any such assets together with the terms and conditions thereof.

(B) Not more than thirty (30) days after the receipt of the information required by subsection (A), above, including specifically the additional information which the plaintiff may request, plaintiff shall advise defendant in writing whether it objects to the proposed sale. If plaintiff does not object to the proposed sale, it may be consummated, but if objection is made, then the proposed sale shall not be consummated until plaintiff's objection is withdrawn or defendant obtains approval by the Court.

XII.

If divestiture is accomplished in whole or in part by means of sale of stock in the spark plug or battery business to the public, defendant Ford shall prohibit each of its officers, directors, employees, agents of Ford or stockholders described in Section X of this Judgment from initially acquiring, or in the case of any such officer, director, employee or agent from owning, any such stock so long as he remains in any such position.

XIII.

(A) Ford is perpetually enjoined from reacquiring control over any of the divested assets.

(B) For a period of ten (10) years from the date of divestiture of the Autolite assets, Ford is enjoined from acquiring or holding, directly or indirectly, any assets of or stock or other beneficial interest in any person engaged in the manufacture in the United States of automotive spark plugs, except that Ford's insurance subsidiaries and the pension and profit sharing trusts of Ford and its subsidiaries may acquire and hold in the aggregate up to two per cent (2%) of such assets, stock or other beneficial interests in any such person.

(C) For a period of five (5) years from the date of sale of the Owosso, Michigan battery plant, Ford is enjoined from acquiring or holding any assets or stock or other beneficial interest in any person engaged in the United States in the manufacture of automotive batteries and from building any new battery plant in the United States or expanding the battery plant owned by Ford, located at Shreveport, Louisiana, except that Ford's insurance subsidiaries and the pension and profit sharing

trusts of Ford and its subsidiaries may acquire and hold in the aggregate up to two per cent (2%) of such assets, stock or other beneficial interests in any such person.

XIV.

For the purpose of securing or determining compliance with this Final Judgment:

(A) Any duly authorized representative or representatives of the Department of Justice shall, upon written request by the Attorney General or the Assistant Attorney General in charge of the Antitrust Division and on reasonable notice to defendant Ford, made to its principal office, be permitted subject to any legally recognized privilege:

(1) Reasonable access during the office hours of defendant, which may have counsel present, to all books, ledgers, accounts, correspondence, memoranda, and other records and documents in the possession or under the control of defendant which relate to any matters contained in this Final Judgment;

(2) Subject to the reasonable convenience of defendant, to interview officers or employees of defendant, who may have counsel present, regarding any such matters.

(B) Upon written request of the Attorney General or the Assistant Attorney General in charge of the Antitrust Division, defendant shall submit such reports in writing with respect to any matters contained in this Final Judgment as from time to time may be requested.

(C) No information obtained by the means provided for in this Section shall be divulged by any representative of

the Department of Justice to any person other than a duly authorized representative of the Executive Branch of the United States, except in the course of legal proceedings to which plaintiff is a party for the purpose of securing compliance with this Final Judgment or as otherwise required by law.

XV.

Jurisdiction of this cause is retained by this Court for the purpose of enabling any of the parties to apply at any time for such further orders or directions as may be necessary or appropriate for the construction or carrying out of this Final Judgment, for the modification of any of the provisions thereof, for the enforcement of compliance therewith, and for the punishment of violations thereof.

XVI.

Defendant Ford shall pay all of the plaintiff's taxable costs herein.

RALPH M. FREEMAN
Chief United States District Judge

Dated: December 18, 1970.

Approved as to form and substance.

W. H. MCMANUS
Attorney, Dept. of Justice

Approved as to form only and without waiving any objections to substance.

WRIGHT TISDALE
For Ford Motor Company

Order Noting Probable Jurisdiction

FORD MOTOR COMPANY, APPELLANT, v.
UNITED STATES ET AL. No. 1552.

Appeal from the United States District Court for the Eastern District of Michigan.

Facts and opinion, D.C., 315 F.Supp. 372.

June 7, 1971. In this case probable jurisdiction noted.

Mr. Justice BLACKMUN took no part in the consideration or decision of this matter.